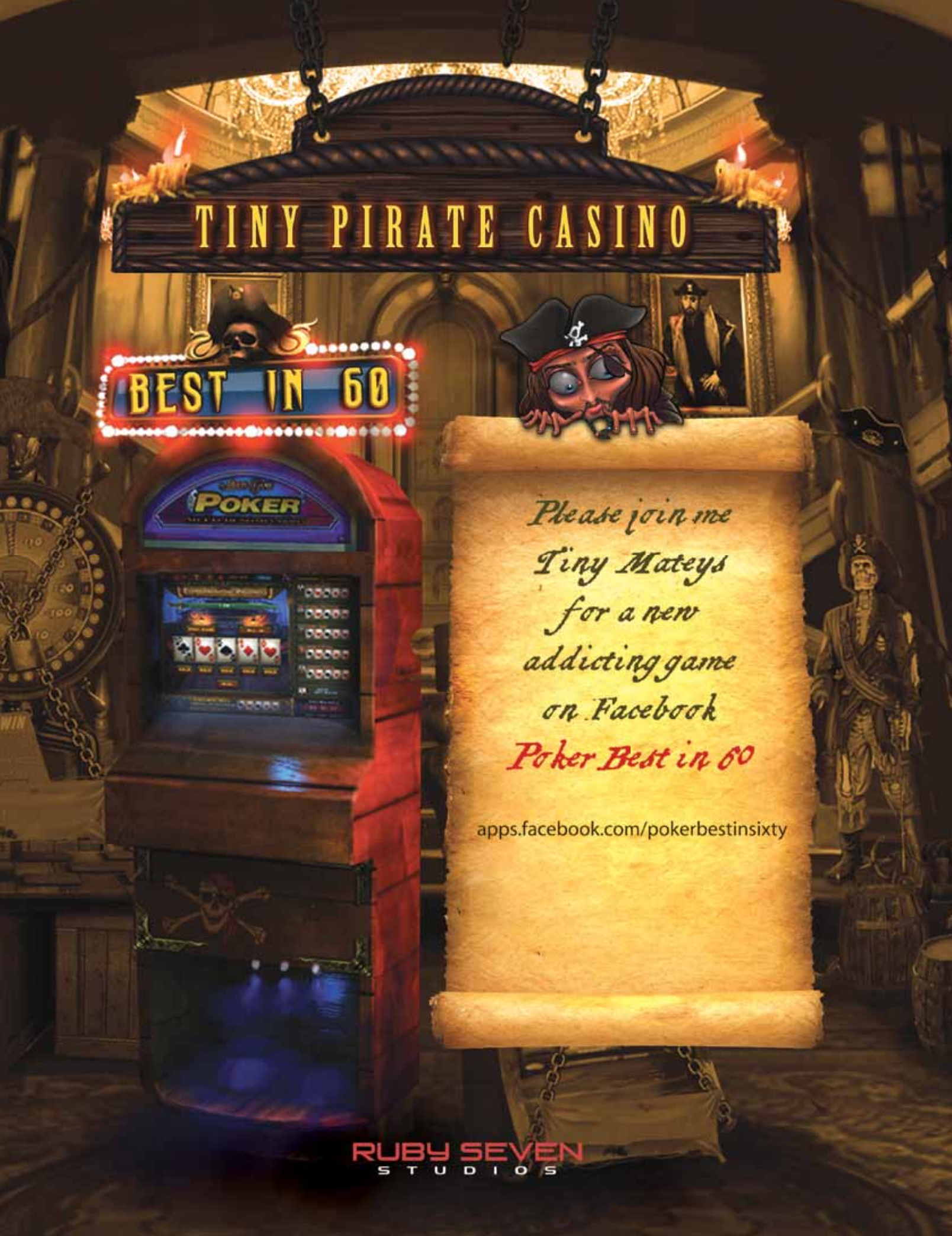
# casual connect

Summer 2012

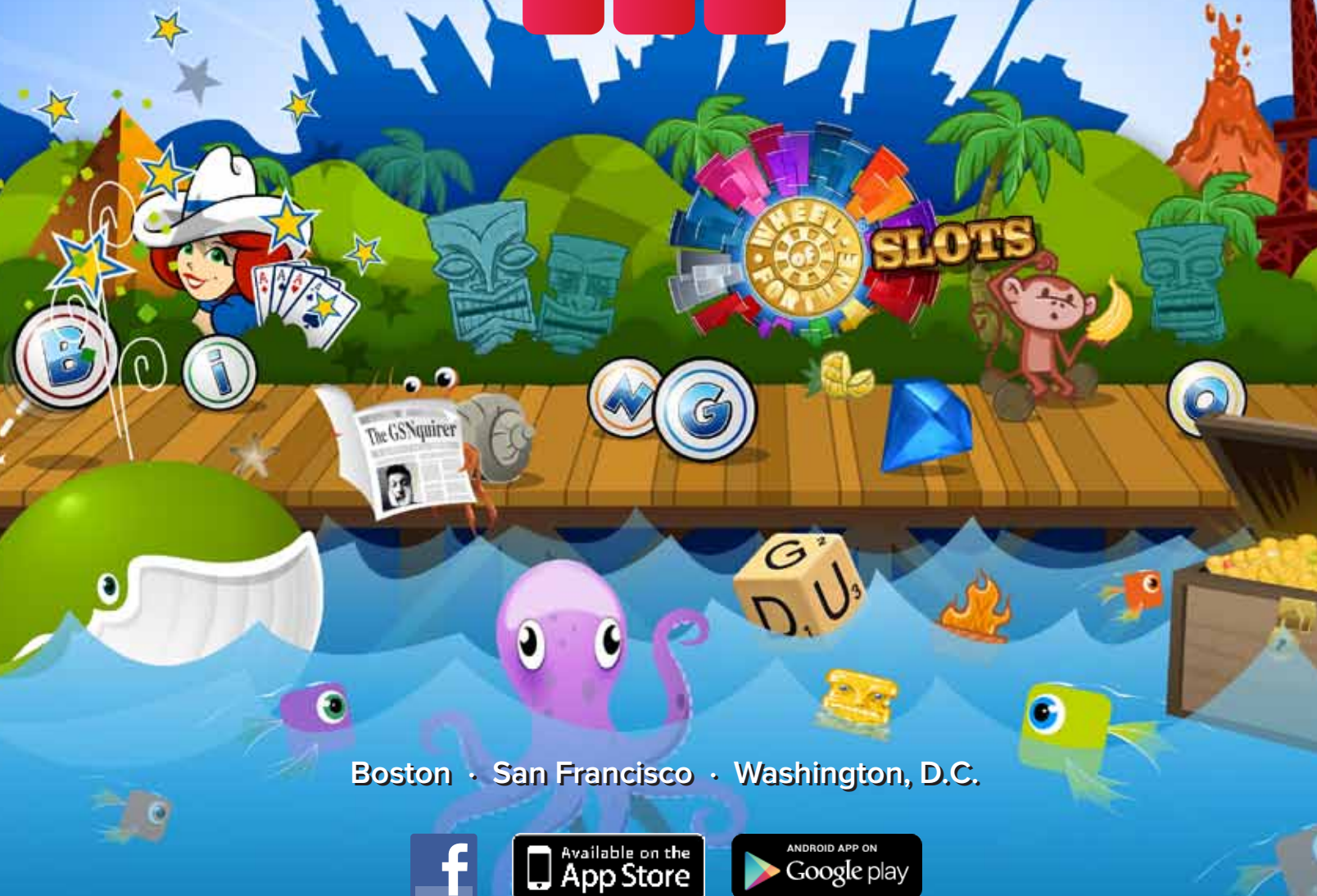

TINY PIRATE CASINO
BEST IN 60
POKER
Please join me
Tiny Mateys
for a new
addicting game
on Facebook
Poker Best in 60
apps.facebook.com/pokerbestinsixty
RUBY SEVEN
STUDIOS

# Want to Get in on the Fun?

## Partner with Us · Join Our Team

www.gsn.com · www.gsn.com/careers
bd@gsn.com · jobs@gsn.com

GSN




Boston · San Francisco · Washington, D.C.

Available on the App Store

ANDROID APP ON Google play

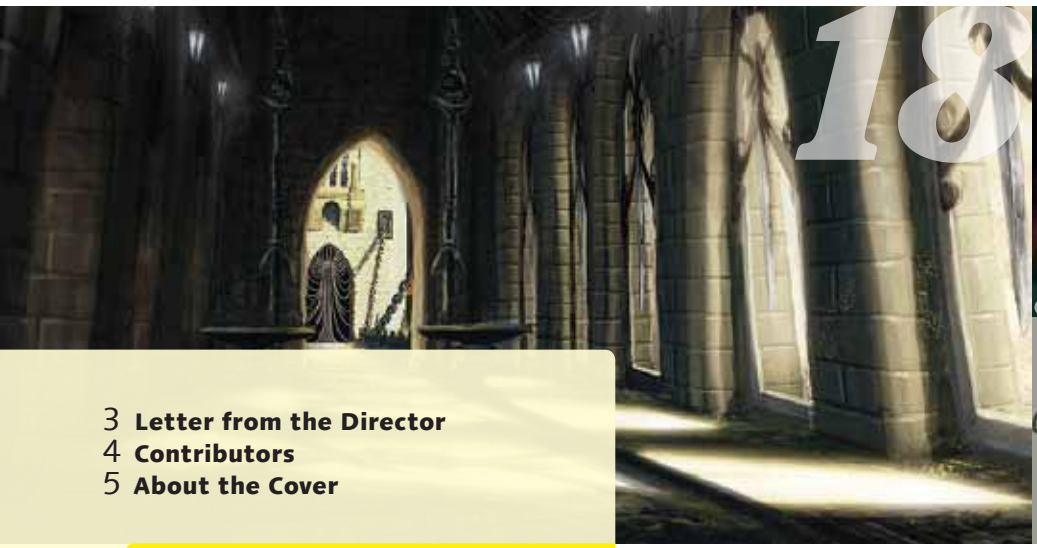
# 3...2...1...

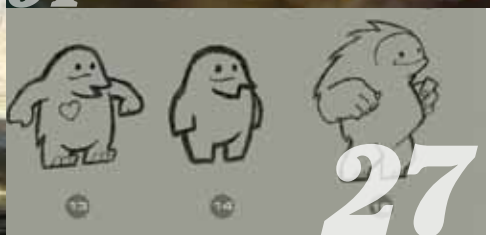
ARKADIUM

www.facebook.com/mahjonggdimensions

# Contents









3 **Letter from the Director**
4 **Contributors**
5 **About the Cover**


## COLUMNS


**BY THE NUMBERS**

6 **What Metrics Matter in a Game's Lifecycle—and When**
*by Mark Gazecki*

12 **New Survey: Who Is the Online Casual Tournament Gamer?**
**And How Is the Economy Affecting This Emerging, Play-for-Money Segment?**
*by Shawn Campbell*

**A PICTURE IS WORTH A THOUSAND WORDS**

18 ***Infinity Blade* Series**

**POSTMORTEM: FOCUS ON PLATFORMERS**

27 **Our Best Game Yeti**
***Sasquatch Survivor—The Adventures of Mimo* Postmortem**
*by Michael Sorrenti*

27 ***"Little Acorns"...***
**Why It Took So Long to Make a Little Game**
*by Andy Gibson*

**STUDIO SPOTLIGHT**

36 **Nekki**

**EXCLUSIVE INTERVIEW**

42 **David Perry**

**NOW WE ARE TALKING**

91 **The Making of *Bastion***
*by Greg Kasavin*


## FEATURES


***[game design]***

48 **Lie Detectors and Paper Beasts**
**A Casual Tale of Biometric Design**
*by Stefano Gualeni*

**WHAT'S HOT: MOBILE** ***[social mobile]***

55 **Grow Your Mobile Game with Facebook**
**Five Features to Find New Gamers and Keep Them Coming Back**
*by Zoran Martinovic*

**WHAT'S HOT: MOBILE** ***[monetization]***

60 **Making the Most of Your Mobile Games Investment**
**Five Tips for Maximizing Mobile ROI**
*by Nick Bogovich*

**WHAT'S HOT: MOBILE** ***[marketing]***

64 **How Game Publishers Dramatically Grow Income through Direct Deals**
*by Claire Teter & Pepe Agell*

**WHAT'S HOT: MOBILE** ***[platforms]***

68 **The Android Opportunity**
**Development, Porting and Device Considerations**
*by David Worle & Brooks Pentheny*

***[in retrospect]***

74 **The Space of Gaming**
**Views of a Tetri-naut**
*by Alex Tarrand*

**WHAT'S HOT: MOBILE** ***[new standards]***

77 **Own the Living Room**
**Expand Your Mobile World with MHL Technology**
*by Michael Bergen*

**WHAT'S HOT: MOBILE** ***[quality assurance]***

81 **Certification Is Dead! Long Live Testing!**
**A New Approach to Mobile Quality Assurance**
*by Jon Atkinson*

***[emerging trends]***

87 **We Have Seen the Future of Casual Gaming**
**"Penny Slots" Become Serious Casino Business**
*by Bill Kunkel & Annie van Bebber*

**PUBLISHER & EDITOR IN CHIEF**
Jessica Tams
**CONTENT PRODUCTION MANAGER**
Yulia Vakhrusheva
**EDITORIAL ADVISORS**
Christopher Natsuume, David Nixon
**EDITORS**
Peter Watkins, Tennille Forsberg, Catherine Quinton
**CREATIVE DIRECTOR & DESIGNER**
Shirin Ardakani
**CONTRIBUTORS**
Martin O.J, Dmitry Terekhin, Greg Kasavin, Clelia Rivera, Laura & Donald Mustard, Mark Gazecki, Andy Gibson, Michael Sorrenti, Stefano Gualeni, Zoran Martinovic, Nick Bogovich, Claire Teter, Pepe Agell, David Worle, Brooks Pentheny, Alex Tarrand, Michael Bergen, Jon Atkinson, Bill Kunkel, Annie van Bebber, Shawn Campbell
**CONTACT US**
**Advertising Sales:**
Luke Burtis, *luke@casualconnect.org*
**Address Changes and Subscription:**
Julie Fridal, *julie@casualconnect.org*
**Article Submission and Comments:**
*editor@casualconnect.org*

**TRADEMARKS**
©2012 Casual Games Association. All rights reserved. Reproduction in whole or part of this magazine is strictly prohibited. Casual Games Association, Casual Connect, the Casual Games Association logo and the Casual Connect logo are trademarks or registered trademarks of Casual Games Association. All other product and company names mentioned herein may be trademarks of their respective owners.

**DISCLOSURES**
The Casual Games Association's ("CGA") Casual Connect Magazine ("Magazine") is for informational purposes only. The Magazine contains current opinions and estimates which may change at any time. Furthermore, the CGA does not warrant or guarantee statements made by authors of articles in the Magazine. Information in the Magazine should not be used as the sole basis for any investment or strategy decisions. While the information included in the Magazine is derived from reliable sources, the reader is responsible for verification of information enclosed in this Magazine and the CGA does not guarantee or warrant the accuracy or completeness of the information. The CGA is not responsible for oversights in opinions or data.

Because of the position of the CGA in the casual games community, nearly all companies listed in this Magazine have contributed funds or services to the CGA in exchange for educational, promotional and marketing services.

**USAGE**
Companies inside of the entertainment business may use information in this magazine for internal purposes and with partners and/or potential partners. Members of the press may quote the Magazine.

Casual Connect Magazine *(http://casualconnect.org/magazine-archive/)* is published three times yearly by the Casual Games Association *(http://www.casualgamesassociation.org/),* P.O. Box 305, Smithfield, UT 84335. Casual Connect Magazine is postal mailed to over 17,000 game industry professionals and members of the press.

**All signs point to Texas.**

Texas has a long history in the game industry, with more than 160 companies calling the Lone Star State home. As a national leader, we have a solid foundation for gaming with our Texas-sized talent pool, a superior, low-cost infrastructure and an unmatched quality of life. In addition, the production incentives available and sales tax exemptions for items and services used to produce games make Texas your go-to destination.

TEXAS FILM COMMISSION
OFFICE OF GOVERNOR RICK PERRY
WWW.TEXASFILMCOMMISSION.COM

# Letter from the Director

There's this guy on my street who drives way too fast. He goes like 100 km/h in the 40 km/h zone. *What is his hurry?* I always wonder.

There are multiple problems with going too fast, of course. Sure, you get where you're going in a hurry, but you almost certainly fail to see a lot along the way. When you're rushing along, you have to focus on the road ahead of you or you'll crash and burn for sure.

For sure.

I've been thinking a lot about "going fast" lately, and not just because there's a maniac down the street who is a threat to curious children and various domesticated animals. In my mind's eye, I'm looking back across seven years (seven!) of the Casual Games Association and wondering: *How did we come so far so fast?* It wasn't that long ago that we were struggling to get someone—anyone—in the press to write something—*anything*—about us. It was a struggle. How could we make our industry seem interesting when we had very little revenue and most people had no idea what a casual game was?

Needless to say, it's much easier to get press now. Somehow we've sped past potholes and speed bumps and *justthatfast* we find ourselves in the mass market. At our first conference in Seattle, we rattled inside the walls at Benaroya Hall. Now, if you're lucky enough to attend this year's conference, you'll wonder why we ever thought we could squeeze another year inside our beloved Benaroya Hall.

*Justthatfast.*

And yet the race continues. The annual conferences are a great reminder that there is no slowing down. The pace is only getting brisker, the competition more fierce. But while you are with us at Casual Connect, do yourself a favor: Pull over for a few minutes and take a good look around. Enjoy the moment. Because before you know it, you'll be looking back across *another* seven years and wondering: *How did we come so far so fast?*

Jessica

Jessica Tams, *Director of the Casual Games Association*
***jessica@casualconnect.org***

## EVENT CALENDAR

**24 - 26 July 2012** — **Casual Connect Seattle**

Benaroya Hall
200 University St.
Seattle, WA 98101

**24-26 October 2012** — **Casual Connect Kyiv**

*Kyiv, in Ukraine, is a modern historical city located between Eastern and Western Europe. Eastern Europe is known for excellent school systems that emphasize math and sciences, while fostering creative thinking. Tetris and about 30% of the Top 10 Games in 2010, were partially developed in Eastern Europe.*

**February 2013** — **Casual Connect Europe**

Congress Center Hamburg
Marseiller Straße 1
Hamburg, 20355
Germany

**May 2013** — **Casual Connect Asia**

*Considered the gateway between East and the West for centuries, Singapore, located in the heart of fascinating Southeast Asia, continues to embrace both tradition and modernization today.*

# Contributors

**David Worle**
***david.worle@casualconnect.org***
David joined WildTangent in November 2007 and currently leads the game content strategy for the WildTangent Game Network. His responsibilities at WildTangent include managing the publishing team and driving current partnerships, as well as prospecting new games for release.
**Redmond, WA**

**Brooks Pentheny**
***brooks.pentheny@casualconnect.org***
Brooks is a Software Test Engineer at WildTangent with a specific focus on Android games and devices. He manages the game catalog for the company's OEM hardware manufacturers and approves all Android content.
**Redmond, WA**

**Annie Van Bebber**
***annie.van.bebber@casualconnect.org***
Annie was Chairman of the Board of the IGDA in 1998. She was a founding partner and VP of Attitude Network, where she led its HappyPuppy.com games site. Her early career was spent in the entertainment industry in radio, music, TV and video.
**Grants Pass, OR**

**Jon Atkinson**
***jon.atkinson@casualconnect.org***
Jon is the Senior Program Manager at VMC responsible for mobile testing and development services. Jon has over 20 years of experience in Telecoms, including 12 years of experience within core networking at Nortel Networks and seven years of running mobile QA teams.
**Montreal, Canada**

**Nick Bogovich**
***nick.bogovich@casualconnect.org***
Nick is Executive Director, Mobile for GSN Digital where he oversees business and product development for GSN's mobile initiatives, including the recently launched GSN Casino app on iOS and Android (www.gsn.com/mobile).
**Waltham, MA**

**ChAIR Entertainment**
**Salt Lake City, UT**

**Shawn Campbell**
***shawn.campbell@casualconnect.org***
Shawn is VP, Gaming Development for ArcadeWeb where he is focused on creating a community gaming experience that is entertaining, engaging and competitive. A veteran of technical production, design and game development experience, Shawn has designed and programmed more than fifty games for the Web over the last dozen years.
**Irvine, CA**

**Alex Tarrand**
***alex.tarrand@casualconnect.org***
Alex Tarrand is a mobile advertising specialist. He has worked within the Disney Interactive Media Group, Electronic Arts, and Xbox on major casual, free-to-play, and freemium game titles.
**Los Angeles, CA**

**Michael Sorrenti**
***michael.sorrenti@casualconnect.org***
Michael is the president of Game Pill Interactive, a studio that specializes in casual games and interactive entertainment. Michael is no stranger to entertainment and consumer brands, having worked previously at Telus, Warner Bros and Paramount.
**Aurora, ON, Canada**

**Zoran Martinovic**
***zoran.martinovic@casualconnect.org***
Zoran Martinovic is a Strategic Partner Manager on the Games Partnerships team at Facebook. He primarily works with mobile developers helping them integrate Facebook and making their games and apps social. Before Facebook, he worked at PayPal, eBay and Google.
**Palo Alto, CA**

**Michael Bergen**
***michael.bergen@casualconnect.org***
As Senior Partner Alliance Manager for the MHL Consortium, Michael Bergen is responsible for generating developer awareness to drive the adoption of MHL technology. Mr. Bergen has over a decade of experience working with publishers and developers of mobile apps and games.
**Sunnyvale, CA**

**Andy Gibson**
***andy.gibson@casualconnect.org***
Andy Gibson, co-founder of Team Pesky, has been working as a professional developer for 13 years at studios including Core Design, nDreams, Blitz and Strawdog Studios.
**Derby, United Kingdom**

**Dmitry Terekhin**
***dmitry.terekhin@casualconnect.org***
Dmitry A. Terekhin is the Founder and CEO of Nekki. Dmitry founded his social games start-up in 2002, and since then his games have reached 25 Million+ users all over the world.
**Moscow, Russia**

**Mark Gazecki**
***mark.gazecki@casualconnect.org***
Mark Gazecki is a serial entrepreneur who has founded several venture capital-backed companies in the online games and Internet sectors. He co-founded HoneyTracks, a company providing a game analytics solution for all types of online and mobile games.
**Munich, Germany**

**Claire Teter**
***claire.teter@casualconnect.org***
Claire is a Publisher Analyst at Chartboost. Before coming to Chartboost, she learned the ins and outs of the mobile game business while working on the Tap Tap Revenge series at Tapulous. She holds degrees in Economics and Management Science & Engineering from Stanford University.
**San Francisco, CA**

**Pepe Agell**
***pepe.agell@casualconnect.org***
Pepe leads the Worldwide Expansion at Chartboost. He holds a Mechanical Engineering degree from the UPC Barcelona and the ETH Zurich. Before coming to Chartboost, he led product management and operations teams in both multinational (Hilti, AG) and software startups (3scale and Innovalley).
**San Francisco, CA**

**Stefano Gualeni**
***stefano.gualeni@casualconnect.org***
Trained as an architect, Stefano Gualeni is an Italian game designer who is best known for designing and writing *Tony Tough and the Night of Roasted Moths* and *Tony Tough 2: A Rake's Progress*. Stefano is a lecturer of game design at NHTV Breda University.
**Breda, The Netherlands**

# About the Cover

**Martin O.J**

Martin O.J has been a leading Game Graphics Artist at ChaYoWo Games for the past four years. He has played a major role in the 3D art production of the *Dark Hills of Cherai* series of hidden object adventure games, creating rich and captivating scenes that recreated the South Indian setting of the game with a fascinating fantastical flavor.

The idea for the cover struck Martin while he was checking out the recent installment of the *Pirates of the Caribbean* movie franchise. "Pirates have come a long way from their days of looting and pillaging," he explains. "Something that pop culture has already done for me is granting pirates an image that is at once menacing and humorous. A caricature style seemed perfect to bring out this duality. Once we zeroed in on the style, all I did was borrow cues from a popular game and add a twist that was decidedly outrageous. I replaced pool balls with lit bombs to better suit the tastes of a swashbuckling band of adventurers spending a daring life on the high seas!"

By the Numbers

# What Metrics Matter in a Game's Lifecycle—and When

***What are the five most important*** *game metrics?* It's a frequently-posed question. Some claim that they have identified the three or seven "magic metrics." Whatever the number—three or five or seven—there is no such thing as magic metrics. In truth, different metrics matter at different stages of the lifecycle of a game.

A lifecycle approach to metrics is in line with the priorities required to take a game successfully to market. Since every game is unique, this approach allows you to cater your metrics to the specific requirements of individual games and their users. Furthermore, once games are launched in the marketplace, they go through phases of early adoption, growth, and maturity, and each phase requires a different set of metrics. This is in line with the popular ARM model, which defines three distinct phases for an online product or service: Acquisition, Retention, and Monetization.

Although the ARM model might lead one to focus initially on optimizing acquisition metrics, the first priority should actually be on retention metrics: No retention, no game. Consider, for example, the two games shown in *Chart 1*—one built for acquisition, the other for retention. The acquisition game has twice the virality but half of the retention of the retention game. Although the number of users shoots up for the acquisition game, it tails off quickly thereafter. On average, the number of users for that game ends up being lower than that for the game with better retention. And if we consider that users typically generate more revenue after they have been in the game for a while, it should be clear that the game with higher retention provides the better basis for sustainable success.

Based on these findings, a game developer's metrics should reflect the following priorities: Retention comes first, then user acquisition, and finally monetization. While focusing on user acquisition, it is sensible to differentiate between general user acquisition and virality. In addition, you shouldn't forget that retention metrics remain important even as the game matures and you shift your focus toward monetization.

Based on those priorities, let me suggest a number of standard metrics that provide good basis for monitoring your game.

## Retention Metrics

In reference to retention and engagement metrics, the following set of metrics provides a good first overview of how the game is doing:

» ***1-to-7-Day Retention*** Measures retention within the first week of sign-up. This is typically calculated on the basis of the number of sign-ups on Day 0, when the users register for the game or install the app: Of the users, who signed up on Day 0, how many were active on Day 1, how many were active on Day 2, etc.

» ***Tutorial Steps Funnel*** Measures how well users complete the tutorial. Here you want to track how many users complete each step and identify which steps in the tutorial see higher drop-off rates.

» ***Drop-off Rates (by Level)*** Shows on which level users exit the game.

» ***Visits per DAU*** Indicates how frequently users play the game.

Once games are launched in the marketplace, they go through phases of early adoption, growth, and maturity, and each phase requires a different set of metrics.

» ***Session Times*** Indicates how intensively users play the game.

» ***Churn Rate (Monthly)*** Measures the rate at which users leave the game. To measure user lifetime in months, which is a metric closely related to the churn rate, divide one by the monthly churn rate in percent. So if your monthly churn-rate is 20%, your player lifetime is 1 / 0.20 = 5 months.

These metrics will lead to specific actions to optimize retention. If high numbers of users do not get through the tutorial, individual tutorial steps might be optimized. If certain levels or stages show high drop-off rates, these might be made less difficult or "funner." Visits per DAU and Session Times might give further insight into whether players have enough to do in the game or whether they might run out of energy. Once you've identified certain areas for improvement, a good way to assess the effectiveness of your changes is to set up A/B-tests and measure results.

by Mark Gazecki;
*Co-founder, HoneyTracks;*
**Munich, Germany**

### Acquisition Metrics: General

Once retention metrics are satisfactory and the game is not just churning through users, you can turn your attention toward user acquisition metrics. This is all about cost-effectively and profitably channeling users into the game. A good starting point for the corresponding metrics are:

» ***Click-through Rates (CTR)*** Measures the attractiveness of ads and whether they get attention. CTR is a useful metric to test out different creative executions.

» ***User Acquisition Cost*** Measures how much it costs to get users into the game through advertising. Specific metrics are cost-per-click (CPC), cost-per-install (CPI), and cost-per-registration (CPA). These metrics complement CTR on testing different ad units as well as different advertising channels.

» ***Metrics by Marketing Channel*** In order to compare users acquired through different marketing channels and ad campaigns, track revenue by channel and campaign. Ultimately you want to be sure that customer lifetime revenue and customer lifetime value (see Monetization below) are higher than player acquisition costs for each channel and campaign.

» ***Metrics by Demographics*** Insight about the profitability of certain demographic groups enables better targeting. This is particularly true for social games on Facebook.

| ASSUMPTIONS | Viral game | Retention game |
|---|---|---|
| Viral invites/user | 2.5 | 1.25 |
| Churn-rate | 80% | 40% |

**CHART 1**
**Number of Active Users in Two Different Games**

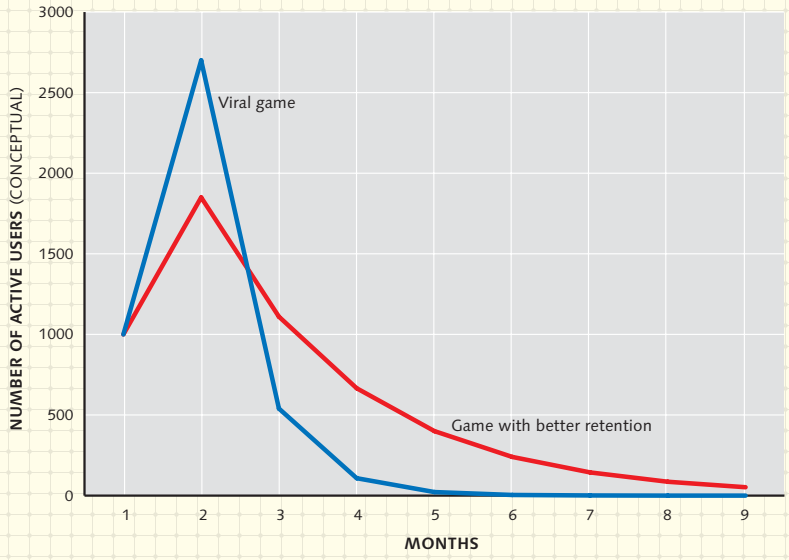
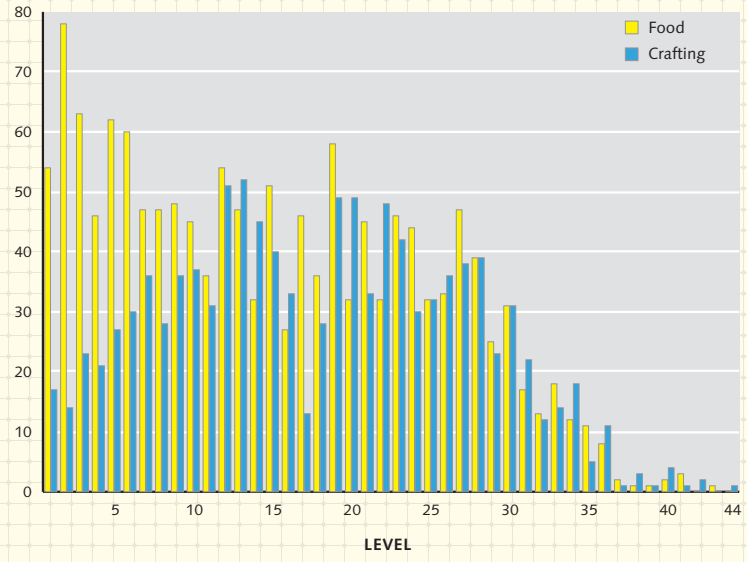



**CHART 2**
**Purchase Virtual Goods by Level**



# Lifecycle Metrics

» ***Metrics by Geography*** Certain geographies might be more profitable than others.

» ***Metrics by User Source*** Just as it makes sense to track metrics for different marketing channels, it makes sense to track them for players which are acquired via viral channels and cross-promotion. Based on such metrics, cross-promotion within a portfolio of games can be geared toward achieving maximum revenues.

sign-ups. A k-factor of 0.5 means that one existing player generates 0.5 new sign-ups over his/her lifetime in the game. Like other metrics, k-factor can be calculated by marketing channel, by demographics, and by cohorts.

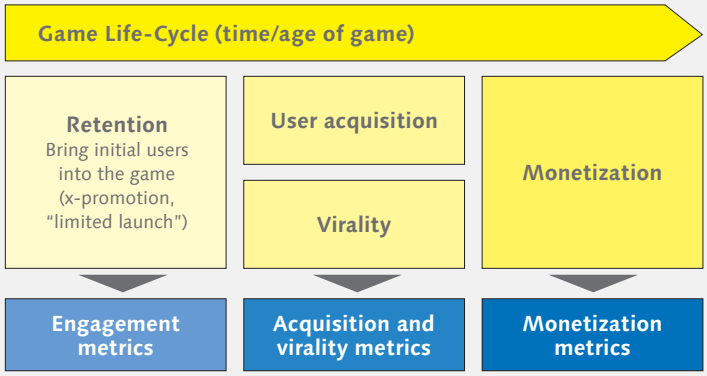
» ***Percentage of Virally Acquired Users (Last 30 Days)*** This gives a simple overview of the viral proportion of users.

» ***Number of Viral Users by Viral Source*** An understanding of how many users come through which viral source helps to determine which viral channels to emphasize and which may need to be changed.

» ***Number of Sent Invites/DAU*** This is a simple measure of the virality of a game and a really easy one to break down in order to understand the effectiveness of different viral messages and viral channels. A/B-testing different messaging, wording, usability, and art on viral messages can lead to more send-outs by users.

» ***Acceptance Rate (by Type of Invite)*** It is one thing to get viral messages out. The counter-point is which viral messages get accepted. Successful virality requires both ends. Again, A/B-testing is useful to experiment with different types of viral messages and viral triggers.

**GAME LIFE-CYCLE KPI MODEL**




## Acquisition Metrics: Virality

In certain game genres, most notably social games, virality can play a significant role in a game's growth. It therefore makes sense to break out viral metrics separately:

» ***K-Factor*** A useful overall measure for the virality of a game. It tells you how many viral users an existing player generates. To optimize virality in an ad-campaign, it makes sense to track the k-factor by marketing channel or ad campaign. The k-factor is calculated with the following formula: k-factor = (infection rate) * (acceptance rate). Infection rate is the number of messages/events through which an existing user exposes the game to others who are not yet playing the game. The acceptance rate measures the conversion of these messages/events into

A game developer's metrics should reflect the following priorities: Retention comes first, then user acquisition, and finally monetization.

## Monetization Metrics

Once retention and user acquisition are working well and the game has an established user base, turn your focus to monetizing that user base. To monitor monetization, the following starting set of metrics is useful:

» ***Average Revenue Per User (ARPU)*** ARPU can be calculated in different ways and for different time-periods. A common way is to divide monthly revenues by MAU or by DAU and track this over time.

» ***Average Revenue Per Paying User (ARPPU)*** This number indicates how much a user who pays actually spends in the game. ARPPU gives an indication of whether there is enough stuff to spend money on once a willingness to pay has been established. ARPPU is calculated by dividing monthly revenue by the number of those users who made a payment into the game.

» ***Payment Conversion Rate*** Given that 80 to 99 percent of players in a free-to-play game never pay, this is a key metric which holds a lot of revenue potential. Optimizing user-flow and providing incentives to encourage players to make a first purchase can help to increase follow-on purchases. Once a player has made a first purchase in the game, the

COMING SOON

Online Play

# WHY LEAVE MONEY ON THE TABLE?

## You made the game
## Now sweeten your reward

## iWin is the Only Complete Lifecycle Solution

**Ad-sponsored Free Play**

**Unlimited Play with All Access**

**Virtual Currency**

**Exclusive Release Games**

**Premium Games**

**Daily New Releases**

iWin®

IWIN, INC. © ALL RIGHTS RESERVED.

youwin@iwin.com

# Lifecycle Metrics

barrier for further purchases is typically reduced, and a second and third purchase follow with a higher probability. Payment conversion rate is calculated by dividing the number of paying users by the number of active users. You can calculate this either on DAU- or MAU-basis. Chart 2 illustrates which virtual goods are purchased on which level. It appears that "food" is useful to players at lower levels whereas "crafting" becomes useful to players on higher levels. Actions to increase payment conversion might therefore include offering discounts on "food" to players on lower levels. If this is successful, a permanent price-drop might be considered to get more players to pay early on.

» ***First Purchase Trigger*** Because a lot revolves around what triggers a player's first purchase, it's important to know which virtual goods are typically purchased first. To improve revenues, make sure that many users get to that particular point in the game and A/B-test different alterations of that particular virtual good.

» ***Average Transaction Value*** This metric tracks the real-money value of players loading their account. Higher is better, but you'll want to maintain a balance between payment packages and how much a player can actually spend in the game. For example, if users can only spend the equivalent of $2 in the game, you don't want a $20 average transaction value—further balancing might help conversion rates, as it might leave fewer players with a lot of unused in-game credits. You calculate the average transaction value by dividing the total currency value of payments made that day by the number of payments made.

» ***Paying User Cohorts*** It is important to understand what attributes paying users have and where they come from. Therefore it is useful to set up user cohorts by marketing channel, demography, etc. and track revenue for these user cohorts. This provides transparency about what types of users drive revenues of the game

» ***Player Lifetime Value (PLTV)*** This metric is the ultimate measure of profitability. Ideally, you'll track PLTV for different user cohorts to identify the most profitable users and where they come from. Any cohort for which PLTV is lower than average player acquisition cost requires immediate attention (or elimination altogether).

**Start with retention metrics. Then move to user acquisition, virality, and monetization metrics.**

**Start with standard metrics. Then move to custom metrics to generate actionable insight.**

**"Peel the onion" to derive actionable insight.** (cohort analysis etc.)

**Understand it is an ongoing effort, which involves multiple functions/departments in your company.** (not all of which are tech people)

**Make sure you have the right game analytics system.** (it should support all of the above)

### Custom Metrics for Actionable Insights

Once you've established a system for high-level monitoring based on these "standard metrics," potential areas for improvement are likely to become apparent. In order to derive actionable insight and pinpoint how to specifically improve the game, "custom metrics" are also helpful. Such metrics are specific to each game: the number of battles, for example, or the ratio of won/lost battles. If, for example, the churn-rate on a particular level is extraordinarily high, it might make sense to track the steps players are supposed to go through on that particular level and identify where players start to run into trouble.

The ultimate goal of any analytics-based effort should always be actionable insight. It should guide product owners to what specifically should be adapted in the game to improve it. The underlying analytics system should be flexible enough to support the changing requirements over a game's lifetime. ❊

# YOUR HTML5 GAMES ON ALL MOBILE DEVICES WITH NATIVE PERFORMANCE THANKS TO

COCOON JS

No new SDK = No code changes in your JavaScript

Code once and deploy everywhere = easier, faster, cheaper

www.ludei.com

ludei

By the Numbers

# New Survey: Who Is the Online Casual Tournament Gamer?

## And How Is the Economy Affecting This Emerging, Play-for-Money Segment?

**At the height of the recession,** numerous reports appeared about how the economy was affecting the casual gaming space. But there has been little follow-up investigation into the impact that the current "post-recession" economy is now having on casual gamers' behavior. And since we needed to know, we decided to ask.

ArcadeWeb.com fits into one of the new, distinct casual gaming and "freemium" segments: free casual tournament sites, where gamers compete to win real cash prizes. Because there was essentially zero data on the casual tournament gamer's profile, behavior or motivations—and no information on how the economy may be affecting a segment where gamers play for real, not *virtual*, rewards—we undertook two surveys this year. They were designed to shed some light on the *who, what* and *why* of the casual tournament gamer, and to find out what those consumers say about how current economic realities are affecting their online gaming habits, including time spent playing, online gaming spend, etc.

We undertook two surveys designed to shed some light on the *who, what* and *why* of the casual tournament gamer, and to find out what those consumers say about how current economic realities are affecting their online gaming habits, including time spent playing, online gaming spend, etc.

The surveys were deployed in February and March 2012 on ArcadeWeb.com, which has attracted 3.4 million monthly unique visitors (on average) since launching in May 2011. Because our site features distinct "pure" casual gaming and casual tournament communities,[1] the demographics and behavior of each population could be uniquely captured and compared. Although over 2,900 of our active gamers participated (1,435 registered tournament players, 1,486 traditional casual gamers), the findings are, of course, specific to our user base and may not be representative of the industry as a whole.

### For These Gamers, the Recession Isn't Over

While pundits talk of economic recovery, it's apparently not being experienced by the casual tournament gamers surveyed:

- 82% of those polled claim they have as many financial challenges or more than they had two years ago.
- 53% report that the still-tough economy is having a *direct* impact on their gaming habits, and 66% of that majority report it has led them to play more, not less.
- Significantly more men (62%) than women (48%)—and more people in the western U.S. (58%) than any other region—claim that the economy has transformed their gaming behavior.

The ongoing financial challenges these gamers report is certainly not happy news, but the new data provides fresh confirmation that the economic downturn has been good for the casual gaming sector. And even if the economy strengthens, and people return to higher-ticket entertainment channels, the habits being formed by increased time spent gaming certainly bodes well for casual gaming's future.

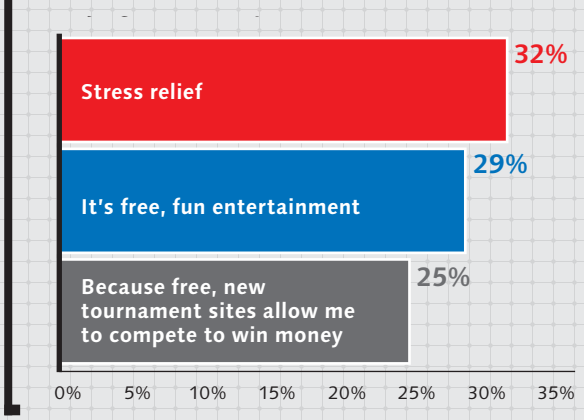
Casual tournament gamers who reported they were playing more because of the economy (35% of gamers surveyed overall) were queried on why they have upped their gaming. The top three reasons are stress relief, free entertainment, and the chance to win money (see *Chart 1*).

"Stress relief" generally ranked higher for older gamers, while "free entertainment" and the rise of more tournament sites ranked highest for the young, under-24 set. What is notable is that it's the "free" aspect of gaming that is driving increased play for more than half of those who reported that they're gaming more because of the economy.

Generally most sites in the casual gaming space, whether big or small, do (at varying

by Shawn Campbell;
*VP, Gaming Development, ArcadeWeb;*
**Irvine, CA**

**CHART 1**
**Among Gamers Reporting They're Playing More—Top 3 Reasons**




While one might imagine competitive tournament gaming would skew male, the gender breakdown for both traditional casual gamers and casual tournament players at ArcadeWeb is exactly the same.

levels of game quality) essentially the same thing: offer up lovably goofy, addicting little three-to-four-minute games. The real differences lie in the monetization models, whether those models revolve around virtual currency purchases or serve up free games supported by in-game advertising. This new data suggests that "free" is now key for a substantial bloc of gamers, and that the economy has, in part, spurred the increased traction for the many casual platforms that offer completely free game-play.

## The State of Virtual Currency Purchases

The survey measured virtual goods purchasing patterns by age, gender and region. Overall, 32% of gamers surveyed report they *have* spent money on virtual currency/credits at online gaming sites. This represents a higher percentage than the 26% recently reported elsewhere for social gamers,[2] suggesting that the casual tournament gamer is an *avid* gamer, and not one naturally averse to spending money on gaming. These are gamers who are discovering new, free and "more than free" alternatives (like play-for-cash tournament sites).

And while these new findings concur with other research showing that younger gamers and male gamers are more likely to purchase virtual currency, the age/gender gap for casual tournament gamers is not as wide as is usually reported for casual gamers overall, suggesting that virtual currency purchases have become increasingly mainstream across all key demographics (see *Chart 2*).

**CHART 2**
**1 in 3 Have Bought Virtual Currency—No Major Age or Gender Gap**

| | Have Purchased |
|---|---|
| **Overall** | 32% |
| Men | 36% |
| Women | 30% |
| Age 18-34 | 34% |
| Age 35-44 | 39% |
| Age 45-54 | 28% |
| Age 55-64 | 30% |

Gamers in the West (41%) were significantly most likely to have paid for virtual currency, while the Midwest (27%) and Southeast (29%) showed the lowest adoption.

## Gamers Plan Big Spending Cuts

Gamers who reported they currently spend money on online games (through virtual currency, subscriptions, etc.) were asked about their plans for the year ahead. Fifty-eight percent plan to cut their online gaming spend (49% "significantly"), with only 7% expecting to spend more (see *Chart 3*).

**CHART 3**
**Planned Virtual Currency/Online Gaming Spend—2012**

| | |
|---|---|
| Significantly Less | 49% |
| Somewhat Less | 9% |
| Same | 35% |
| Somewhat More | 4% |
| Significantly More | 3% |

In virtually every segment of the population—men and women, age groups from 18 to 64+, all U.S. regions—at least 40% of gamers surveyed plan "significant" online gaming spending cuts in 2012.

Given this spend-resistance, it isn't surprising that 84% of these gamers report that they prefer totally free, ad-supported gaming sites (versus the 16% that prefer pay-for-play sites

# New Survey

with no ads). Of course, very few people will ever claim that they plan to spend more on *anything* in the future, but the spend-aversion reported here is powerful. And the data echoes a recent Magid Associates survey of social network gamers, which found that the average gamer's spend at social gaming sites will drop 35% over the next 12 months.[3]

The casual tournament gamer is an *avid* gamer, and not one naturally averse to spending money on gaming. These are gamers who are discovering new, free and "more than free" alternatives (like play-for-cash tournament sites)

## Profile of the Casual Tournament Gamer

The survey revealed that these casual tournament gamers fall heavily into the middle of the age spectrum, with the sweet spot between 35 and 54. Traditional casual gamers at our site, conversely, are more likely to occupy the upper and lower ends of the age spectrum (see *Chart 4*).

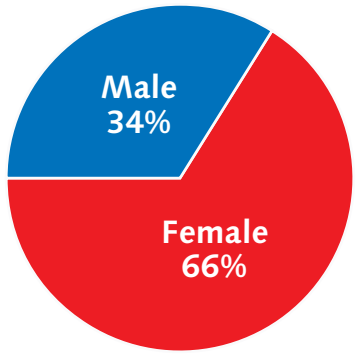
**CHART 4**
**Casual Tournament vs. Traditional Casual Gamers – By Age**

| | Casual Tournament | Traditional Casual |
|---|---|---|
| **Under 18** | 1% | 19% |
| **18-24** | 15% | 11% |
| **25-34** | **23%*** | 7% |
| **35-44** | **20%*** | 12% |
| **45-54** | **24%*** | 20% |
| **55-64** | 13% | 18% |
| **64+** | 4% | 13% |

***Segment's "Sweet Spot"***

Interestingly, while one might imagine competitive tournament gaming would skew male, the gender breakdown for both traditional casual gamers and casual tournament players at ArcadeWeb is exactly the same: 66% female and 34% male (see *Chart 5*).

**CHART 5**
**Gender Breakdown Same for Tournament and Casual Gamers**




With casual tournament gamers skewing significantly female and "mid-aged," casual sites looking to attract players to new competitive, real-money platforms may want to advertise at an iVillage rather than a Disney. And, of course, marketers that traditionally target an "iVillage" demographic, may, to their surprise, want to consider a presence at casual tournament gaming sites.

Comparing the regional breakdown of online tournament gamers with regional population density figures (see *Chart 6*), the Northeast actually runs ahead of the Southeast as what one could dub the casual tournament gaming "capitol." But online tournament gaming adoption is relatively balanced across the U.S.

**CHART 6**
**Where Casual Tournament Gamers Hail From**

| | % of Gamers | Regional Population |
|---|---|---|
| Southeast | 28% | 78 million |
| **Northeast** | **27%** | **55 million** |
| West | 25% | 72 million |
| Midwest | 19% | 67 million |

*(US Census data, "West" includes Mountain and Pacific states.)*

## "Sticky" Casual Tournament Gaming

A comparison of time-spent-gaming by traditional casual versus casual tournament gamers at ArcadeWeb's separate gaming platforms reveals how a competitive, tournament "layer" leads to significantly greater site engagement and "stickiness"(see *Chart 7*).

**CHART 7**
**Time Spent Playing: Casual Tournament vs. Traditional Casual Gamer**

| | Casual Tournament | Traditional Casual |
|---|---|---|
| **<1 hour** | 10% | 30% |
| **3 hrs+** | 67% | 48% |
| **6 hrs+** | 39% | 27% |
| **10 hrs+** | 23% | 16% |

For instance, 44% more tournament players than "regular" casual gamers report playing over six hours a week at ArcadeWeb. More than two-thirds of tournament players play over three hours a week at the site. And, as a point of comparison, the average Facebook user only spends roughly an hour and twenty minutes at that notoriously sticky site weekly.[4]

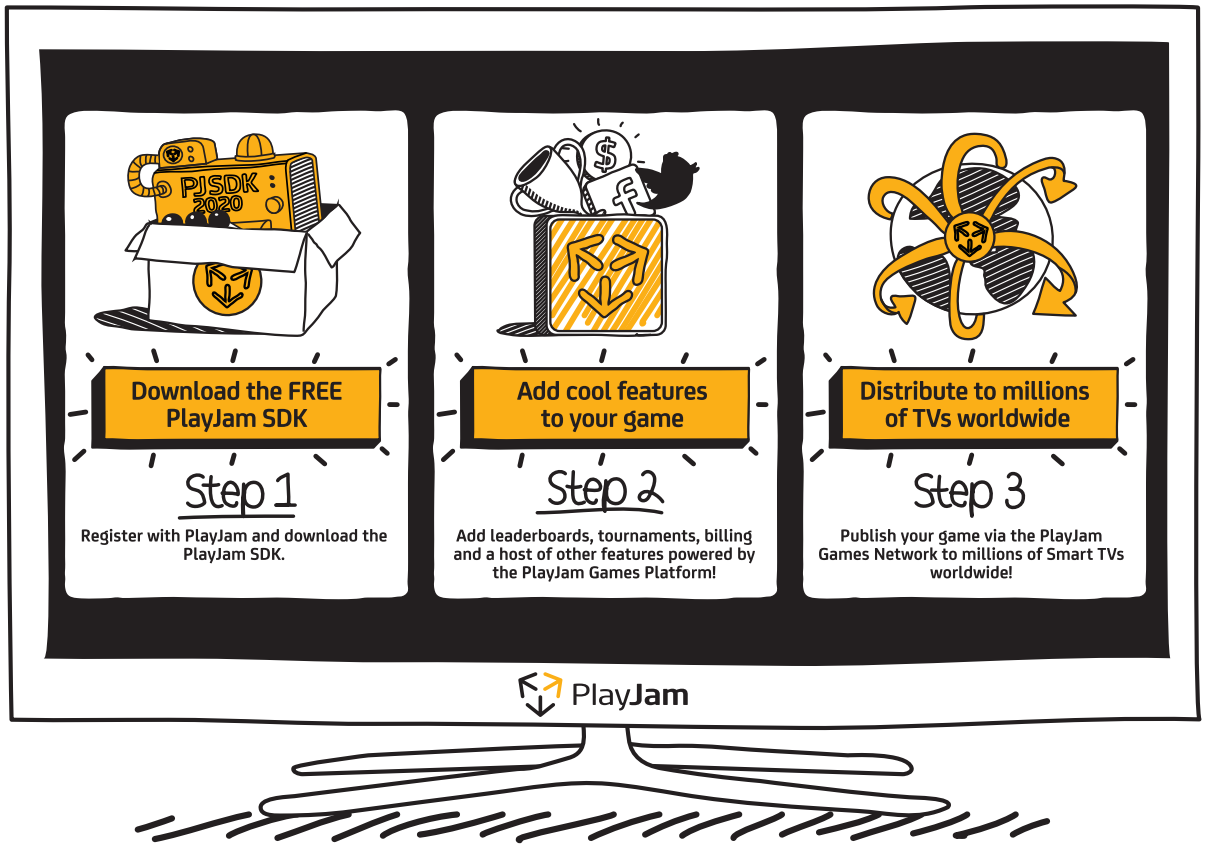
Older tournament gamers surveyed play the very most. For instance, 23% of those aged 55-64 report spending a staggering 20+ hours a week playing at ArcadeWeb. And more than twice as many (35%) tournament gamers aged 55-64 spend 10+ hours gaming at the site, compared with those aged 18-34 (16.5%).

To understand which components are incentivizing gamers to spend more time playing, it is important to note the "engagement" mechanisms ArcadeWeb offers tournament gamers. The key difference between tournament and traditional casual game-play at the site is that tournament players log in before a session and compete for a highest daily game score to win a cash gift card. While there is a "top scores" leaderboard, and a social "bragging rights" element (with tournament winners profiled at the site), there are no real-time, one-on-one challenges or social, sharing/trash-talk forums.

PlayJam

# The Smart TV Games Platform

## Get Your Games on Smart TV


PJSDK 2020
Download the FREE PlayJam SDK
Step 1
Register with PlayJam and download the PlayJam SDK.
Add cool features to your game
Step 2
Add leaderboards, tournaments, billing and a host of other features powered by the PlayJam Games Platform!
Distribute to millions of TVs worldwide
Step 3
Publish your game via the PlayJam Games Network to millions of Smart TVs worldwide!
PlayJam

## Spanning All Major TV Platforms

SAMSUNG · LG · SONY · Panasonic · Google TV · WD · Opera · VESTEL · YAHOO! WIDGETS

**Contact us today to see how you can access millions of Smart TV devices worldwide!**

@playjamcorp www.playjam.com @playjamdev

# New Survey

In essence, our tournament players are gaming just as they always would, but the chance to win real money "layer" has been added—and that represents the critical engagement driver. We're all aware of how much time people spend at slot machines or poker, but unlike gambling or lotteries, at ArcadeWeb there is no risk or even $1 required. We've found that gamers are skeptical of "million-dollar jackpots" with low odds of winning, but they are incentivized by a high volume of smaller cash prizes ($50 or $100). In this new survey, 43% of tournament gamers reported they have won cash at ArcadeWeb, and these very high odds of winning seem to entice them to stick around and play a lot. The takeaway for gaming sites is that even modest cash prizes, and a simple tournament overlay, can significantly galvanize time spent gaming.

We've found that gamers are skeptical of "million-dollar jackpots" with low odds of winning, but they are incentivized by a high volume of smaller cash prizes ($50 or $100).

### Looking Forward: The "Real Money" Future

Our survey sheds some initial light on a niche, but growing, new gamer and "freemium" business model: the casual tournament player and platform. This is a gamer who reports a strong aversion to pay-for-play models, a gamer whose current increased time-spent-gaming is largely being driven by the "free games equation," including the rise of sites (like ArcadeWeb) that allow them to compete to win real money. The amount of time-spent-gaming by this segment suggests it's a very interesting model to watch. Adding a tournament, real-rewards "layer" to casual games environments seems to lead directly to greater user engagement and site "stickiness."

It remains to be seen how many casual tournament players would embrace real-money, casino-type games, or how many real-world gamblers would be attracted to social or casual games that include a gambling component.

Given that the virtual currency model (giving away games for free, then offering a higher level of interaction "for a fee") is so ubiquitous, one can understand why that market has grown 27% since 2009,[5] and should grow again in 2012. While virtual-currency-driven "freemium" is by far the most dominant, discussed casual model (and it's not going anywhere soon, given how hot it is on mobile), the industry still needs to better understand new, very different models and the consumers they attract. These can span social casino games (like *Slotomania* or *Caesars Casino*) that reward winners only with virtual currency; those offering free casual tournaments with virtual rewards; and sites like ArcadeWeb, Gamesville, Pogo, GSN or iWon!, which revolve around tournaments that award frequent cash and other tangible prizes.

And, of course, the big, recent news is how some casual companies now have their eyes on the "slots" and online gambling—with analysts forecasting a convergence between social games and real money gaming. There's been a whirlwind of "real-money" activity: Zynga looking to partner with casinos like Wynn to get into online gambling; Caesars Entertainment buying *Slotomania* developer Playtika; IGT buying DoubleDown Interactive and Facebook preparing for online gambling in the UK. Everyone agrees that the money Zynga makes on *FarmVille* chips would be very small potatoes compared with the multi-billion real-money betting opportunity. Gambling models that involve risk (spending real money to win real money) are very different from ArcadeWeb's "safe thrill" tournament model, and real gambling is, of course, an addiction of a different order than "addicting casual games." It remains to be seen how many casual tournament players would embrace real-money, casino-type games, or how many real-world gamblers would be attracted to social or casual games that include a gambling component.

It also remains to be seen how big the future really is for the virtual currency purchase/rewards model. But if that model can become mainstream entertainment, I would bet that these very diverse "real money" models should have an even more powerful future in the gaming space. Real money gaming is showing powerful momentum, and I think we'll find that casual gaming platforms with real cash and more tangible rewards components will increasingly prove hot—*in any economy.* ❊

1 The site has roughly 600,000 casual tournament-playing members. These registered members log into the site at the beginning of each game-play to compete for daily cash prizes.

2 PopCap Games/Information Solutions Group survey, 11/2011

3 Frank N. Magid Associates national survey, March 2012. Among social network gamers who spend money on these games, the average spend is projected to drop from $78 in 2011 to $51 over the next 12 months.

4 Facebook data, March 2012

5 Magid Advisors Research, 2012

playspan®

# UltimatePay™ is Ultimate Power

## The Complete Monetization Platform offering Payments, Subscriptions and Microtransactions for Online Games and Apps

- 100 Payment Methods from Around the World
- Real-Time Fraud Protection tailored for Digital Goods
- Customer Support Tools Enabled Rapid Resolution
- Comprehensive Reporting and Analytics

## Stop By for a Demo
## Find us @ B6 *(by the entrance)*

www.playspan.com
bizdev-ps@visa.com

PlaySpan is now part of Visa

VISA

# A Picture Is Worth a Thousand Words

# *Infinity Blade* Series

In December 2010, Epic Games' award-winning studio ChAIR Entertainment introduced *Infinity Blade* for iOS. Powered by Unreal Engine 3, *Infinity Blade* brought handheld gaming to new heights with gorgeous visuals, adrenaline-fueled battles and advanced character progression in a fully 3D castle realm. With millions of players worldwide, *Infinity Blade* is one of the most popular games ever launched on the App Store, receiving numerous Editor's Choice and Game of the Year accolades. It also received the "Excellence in Design" Award at the 2011 International Mobile Game Awards and the prestigious 2011 Apple Design Award.

The battle continues with *Infinity Blade II,* released in December 2011. In *Infinity Blade II,* players journey deeper into the world of the Deathless Tyrants and their legions of Titans, building their skills and upgrading characters in new ways as they delve further into the story of this mysterious, timeless adventure. The award-winning sequel also introduces innovative new social features, allowing gamers from around the globe to team up to participate in unique "massively social," group-based challenges to defeat enemies, unlock rare treasures and earn exclusive items. Players can post their progress to Facebook and Twitter feeds as they recruit friends to their own "Mob" for special perks, new achievements, and special rewards.

Further expanding upon the games, ChAIR introduced *Infinity Blade: Awakening,* a digital novella written by acclaimed fantasy author Brandon Sanderson *(A Wheel of Time, Mistborn).* Within the first 24 hours of its release, the novella debuted in the iTunes Top 10 for overall sales and was ranked #1 on the Fantasy charts.

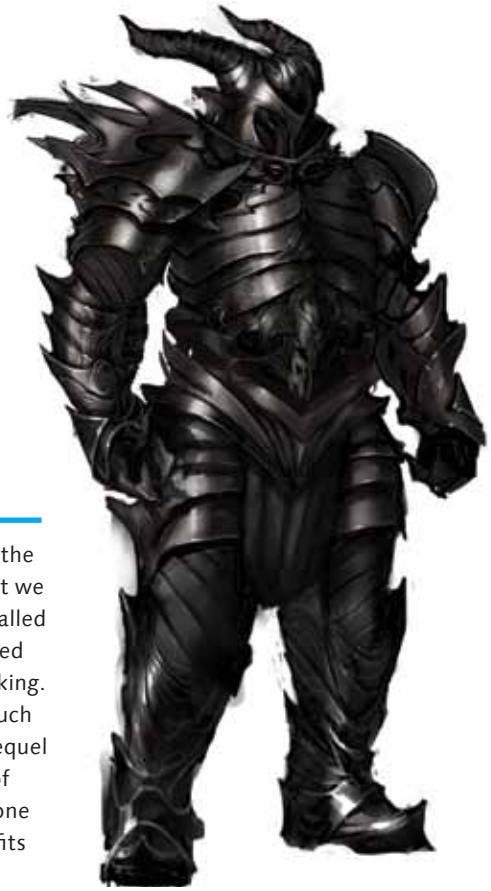
With *Infinity Blade II,* we really wanted to push our main knight's design further to straddle sci-fi and fantasy. At the same time, we wanted to create a more iconic character that people would immediately identify with in the *Infinity Blade* universe.

This is the very first piece of *Infinity Blade* concept art. We knew from the very beginning it would be an epic battle with Titans with a strong, harmonized palette. It is interesting to see how closely we followed this original design.

## The team at **ChAIR Entertainment**

This castle painting was a very early concept for *Infinity Blade II.* We knew at that point that the passage of time was going to play a major role within the game. We wanted something simple and iconic. We ended up with the idea of a tree growing up within the castle. This piece really shows the kind of mood that we push for in *Infinity Blade.*

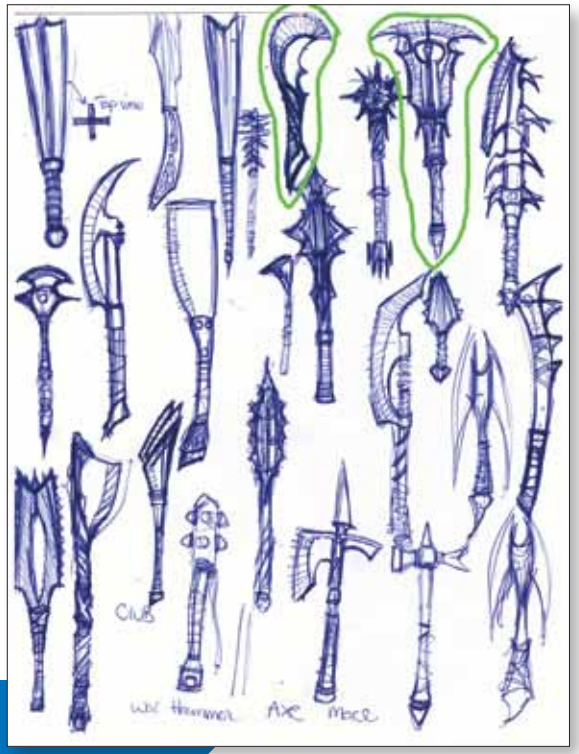
This is a closer rendering of what the castle looks like in *Infinity Blade II.* Originally we wanted it nestled in a hazy mountain landscape. Eventually the overall visual design pushed away from this setting.



There was a character in the original *Infinity Blade* that we loved so much. He was called the Dark Knight. He served as right hand to the Godking. We liked his motifs so much that we decided in the sequel to create an entire race of fighters for him. Here is one of those characters that fits with the Dark Knights.

One of the first characters that our very talented character artist Bert Lewis designed and built was the Feral Troll. The Troll marks a point in development where the team was really able to see where the visuals were heading. This Troll generated a lot of excitement and momentum for the team early in development when we knew our production time was limited.

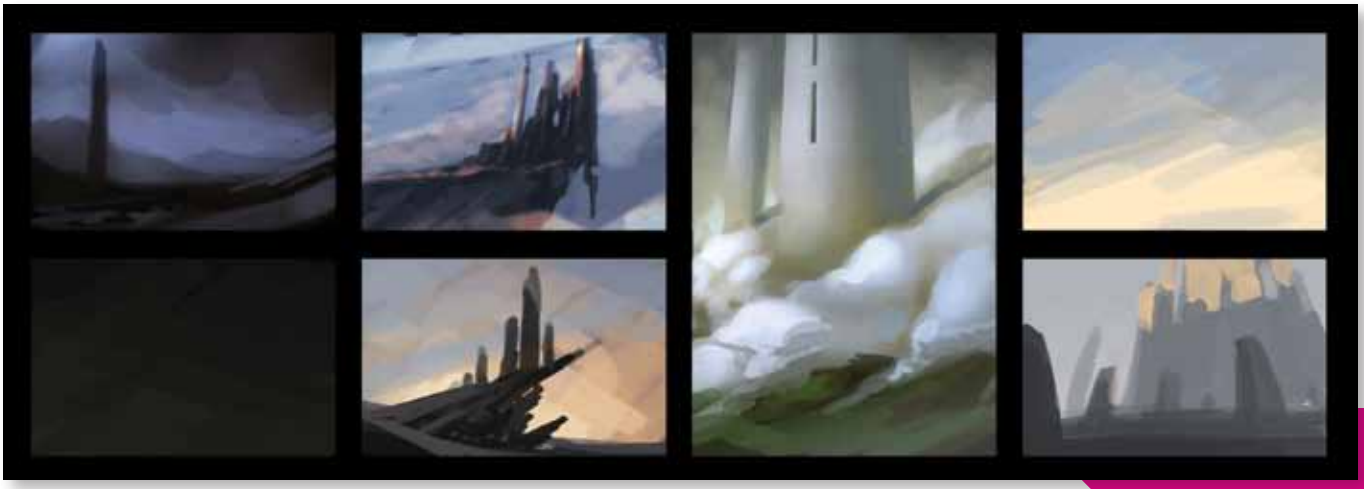
# *Infinity Blade* Series



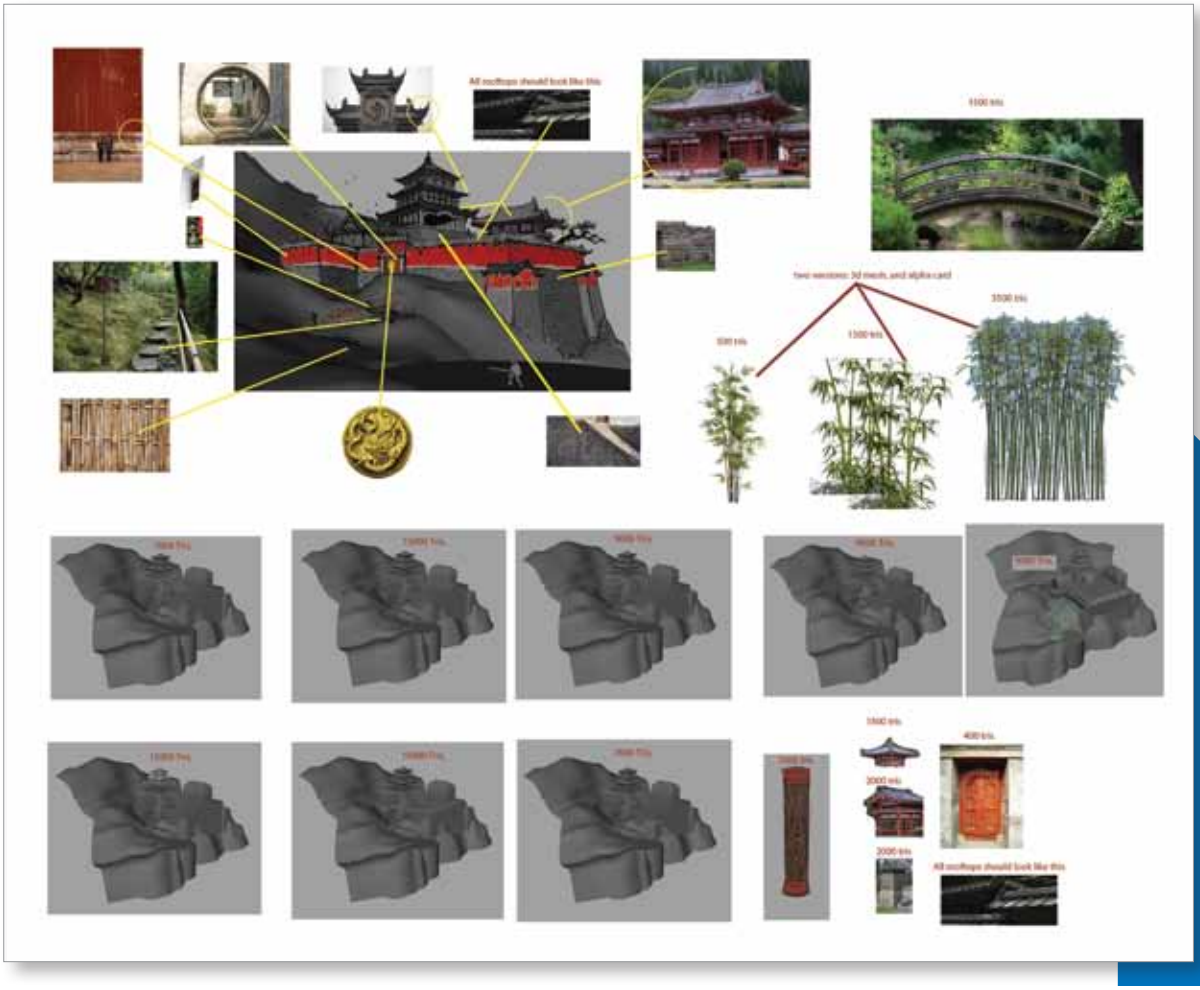

Here is a very small sampling of the number of designs that we go through to come up with our cannon of weapons. In the end, we base our selection of weapons on its silhouette, on the material type, and (especially) on how it will play against all of our other items.

We don't have furries or mythical creatures like Minotaurs or Griffins in *Infinity Blade*. We try to take common conventions and tweak them so they feel fresh yet familiar. The Minotaur from *Time Bandits* was a big influence on this particular design.

The development of the Barbarian race in *Infinity Blade II* provides a great example of how collaborative our team is. We are small and we all wear a bunch of hats. So, when we are in preproduction we all put on our concept hats. It is a great strength because when one of us gets tired of a concept we can just bounce it to the guy sitting next to us and have him riff on it. In this case we were also able to send it to Jay Hawkins at Epic Games for a cycle or two. Then we responded to his design for the final one. Bouncing art back and forth has invariably given us stronger results in the end.



This represents very early roughs for what an iconic castle on the cliffs would look like for *Infinity Blade I*.



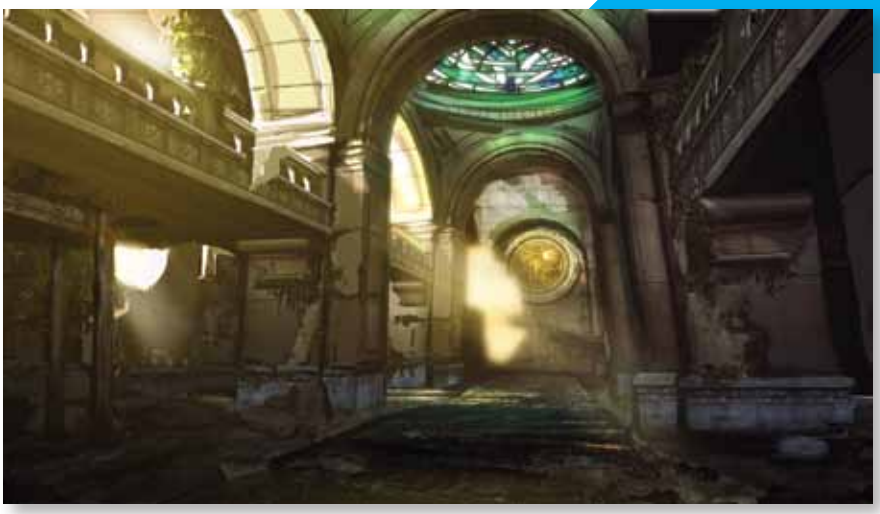
Our early style sheets tend to be of this flavor. We will generally build our environmental pieces in rough meshed form and then work with Epic Games China, who take the specs we give them and knock it out of the park.

# *Infinity Blade* Series

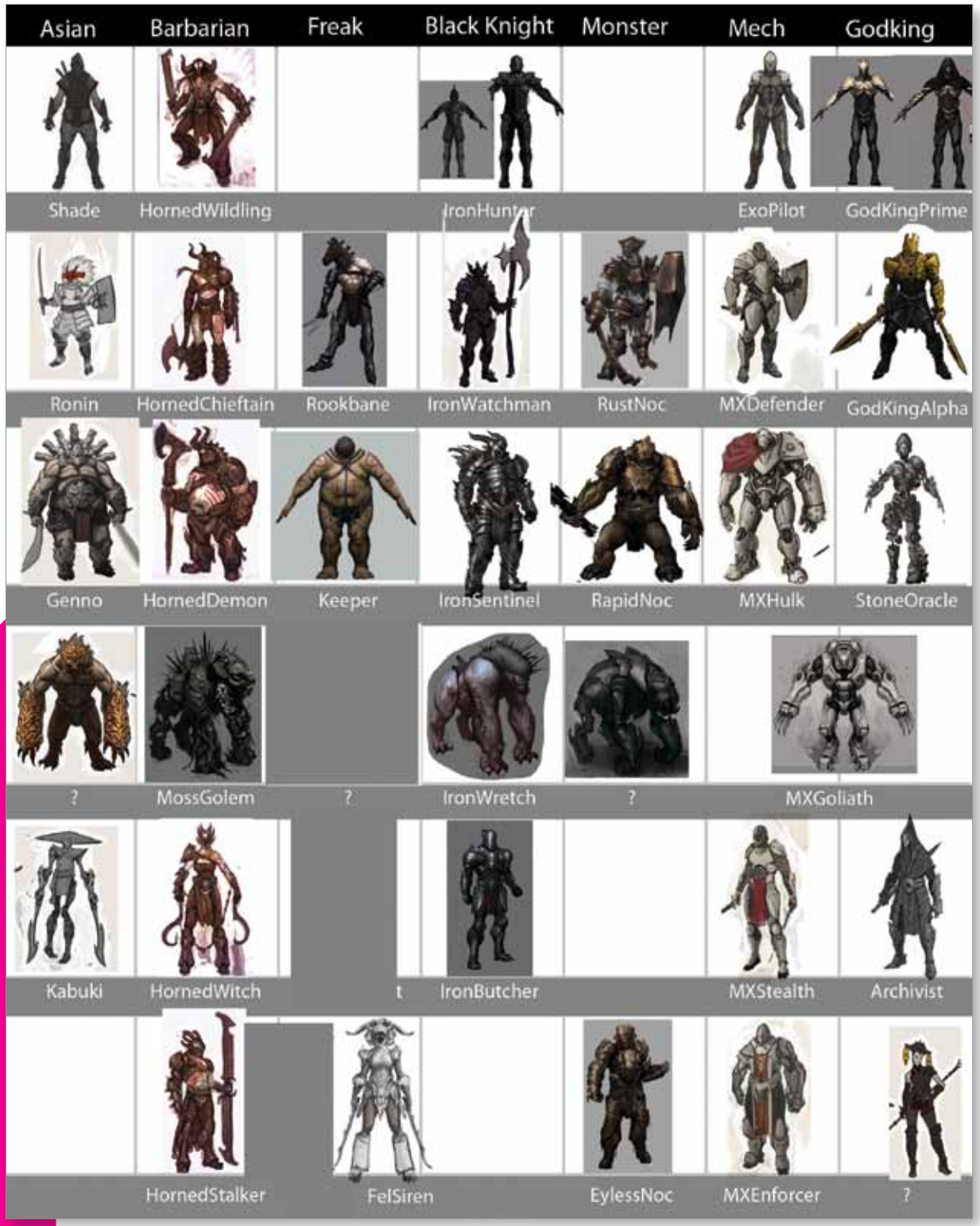
Environments will also get a thumbnail treatment early on to see if there are motifs or concepts for rooms that catch our eye.

Here is a sample of what the final concept of weapons will look like before we build the in-game assets.

The Clock Room was designed as a response to what looked good in *Infinity Blade I* and the new technology that we would be getting in *Infinity Blade II*.



We came up with a matrix of character designs for *Infinity Blade II*. It really helped out early on to map out the direction we wanted to go in terms of character races, color, and game-play.



# *Infinity Blade* Series

We went back and forth about whether or not to include this in the game. We felt it was really important to have a landmark for navigational purposes. In the end we're glad it got in.

Canada
Creative, Avant-garde, Competitive
Come visit us at
Venez nous rendre visite
Canada at Casual Connect Seattle 2012
Benaroya Hall, 2nd Floor
July 24, 25 & 26
Canada
CIAIC
canadian interactive alliance
alliance interactive canadienne
TAKEOFFCSH
CREATIVE SERVICES HOUSE
Government of Canada
Gouvernement du Canada
The Canadian Trade Commissioner Service
Le Service des délégués commerciaux du Canada
GAME NATION

# We want your brains.

PopCap is on the hunt for bright, talented people with a passion for making the world's best games. What's in it for you? A super-fun environment, rewarding work, awesome benefits and lots of free food. It takes big, delicious brains to make award-winning titles like Plants vs. Zombies,™ Bejeweled,® Peggle® and Zuma's Revenge!™ Are you up to the challenge?

**PopCap.com/jobs**

PopCap®

Scan for more information.

©2012 Electronic Arts Inc. PopCap is a trademark of Electronic Arts Inc.

# Postmortem: Focus on Platformers

## Our Best Game Yeti

### *Sasquatch Survivor—The Adventures of Mimo* Postmortem

***Sasquatch Survivor—The Adventures of Mimo* is a platform** puzzler in which you control Mimo, a young yeti who was accidentally left behind after a massive snowstorm forced his tribe to travel to warmer climates. The game follows Mimo as he spans harsh terrain and fends off predators, building the ramps, bridges and defenses needed to survive the journey south. Each level consists of either a puzzle that must be solved in order to span a gap in terrain or a defense that must be built to thwart oncoming attacks from beaver, rams, bears and other unfriendly critters. The game uses mouse and/or keyboard controls for the online version and uses touch controls for the mobile version.

The idea for *Sasquatch Survivor* seemed to come out of nowhere. It began with an idea for a new kind of game mechanic (or at least new to my brain). That mechanic may have been inspired by my daughter's Mega Bloks, or perhaps by the construction taking place outside my office window. Usually when I have ideas, I put them in a folder—a folder now brimming with long-forgotten ideas. But this

**continued on page 28**

## From *"Little Acorns"*...

### Why It Took So Long to Make a Little Game

***I guess Little Acorns* started out as *Hurry Home, Mr. Squirrel!*,** which in turn started out as a drawing by my then four-year-old son, Luke. He drew a tree and a squirrel family and said he'd designed a game. It was a diversion from the usual planes and tanks and soldiers, and it got me thinking more about "values" in games.

Having made art for games for a long time, I decided to prototype a simple game I could use to learn a bit of coding. I found a 2D platformer sample using the XNA SDK on Xbox 360, and taking my son's drawing as inspiration, we agreed it would be all about collecting enough acorns to feed your ever-growing squirrel family.

Two years later, *Little Acorns* debuted on the top banner of the iTunes App Store via Chillingo. And the response from consumers speaks for itself:

- #3 in Adventure Games (iPad)
- #4 in Family Games (iPad)
- #8 in Adventure Games (iPhone)
- #8 in Family Games (iPhone)

**continued on page 30**

# Focus on Platformers - *Sasquatch Survivor*

continued from page 27

idea was different. I knew I would make this game.

### Testing the New Mechanic

As far as we know, there is no game out there like ours—and we are happy about that. But a new mechanic requires that you teach players through game-play, which in turn requires many more hours of play-testing. After months of working on the game from concept to initial build, it became almost impossible for us to see the game the way a new audience would, which made outside testers absolutely vital. We enlisted testers from all walks of life: male and female, young and old.

Testing changed the game-play in several ways. For instance, in early implementations, blocks that the player had placed could be easily knocked over or accidentally moved when placing additional blocks—which was very frustrating for play-testers. We solved the issue by adding more weight to placed items. Based on tester feedback, we also adjusted the way players select and place inventory items in the play area. We discovered that a drag-and-drop approach is much more intuitive than clicking to select and clicking again to place. Controls were also a big eye opener. What felt too fast for some testers was too slow for others. So we repeatedly tweaked the speed of Mimo's movement until his controls felt universally tactile and responsive.

We also discovered that bite-sized chunks of game-play were most effective in maintaining a player's attention. Whether the player is building a defense or solving a terrain challenge, we found that the levels needed to be short and punchy and that the game needed to move quickly between building and results.

### Working to Create an Emotional Bond

Our goal in *Sasquatch Survivor*, was to make a game that the whole family could enjoy. We also wanted a game that featured a character players would care about, thus creating an emotional bond between the player and the game. Since our team was comprised entirely of males, we wanted a variety of perspectives to ensure that the character would appeal to both genders. We went through dozens of character concepts and tested them out on our wives, children, and close friends to come up with the final design of Mimo. We also put a lot of thought into how the character would be animated, striving to make sure that Mimo's actions were tentative and vulnerable, rather than macho or heroic. We felt that this would be consistent with the character's circumstances while also helping create a deeper bond with all types of players.

To deepen that sense of connection, we designed our story specifically to help create pathos. Mimo is trying to rendezvous with his lost tribe, after all, and we believe that the emotions surrounding separation from and reunion with family are universally relatable.

> Usually when I have ideas I put them in a folder—a folder now brimming with long-forgotten ideas. But this idea was different. I knew I would make this game.

### Money Matters

Game Pill is a studio that partners with clients, does work for hire, and creates its own IP—a triple threat. We are always on time and on budget with all of our client projects. What made *Sasquatch Survivor* different was that we kept coming up with improvements, and we were continually iterating on the build. Now we hope all this pays off financially, but it did put us over budget. In the future, we will involve our accountant to create a formal budget upfront that we will constantly monitor to identify cost overruns, opportunity costs (the cost of not working on something else), scope creep, etc. Next time we will also allow 10 percent of the budget as a cushion for potential over-runs.

by Michael Sorrenti;
*President, Game Pill Interactive;*
**Aurora, ON, Canada**

We considered a number of revenue options as we prepared to release *Sasquatch Survivor*, including flat fee, micro-transactions, and donations. Ultimately we decided to release the game as free-to-play in order to gain as many fans as possible. As a source of revenue, we are surrounding the game with ads. For those fans that really love the game and want to try it in tablet form we are offering a link to download the Android version that will feature an additional five levels and extra in-game items that can be purchased for Mimo. We also found porting to Android from AIR to be relatively simple and worth the associated costs, including time, testing and device costs.

So far, the response has been very promising. Through the end of March, 2012, we had generated 450,000+ plays, with many more to come as we release the Android and iOS versions.

## Working as a Team

The core team that worked on *Sasquatch Survivor* included a project manager, an artist, and a programmer. Another three team members came on and off the project to contribute to writing, music, and testing. Although we had a game design document, we were not closely tied to it, as many revisions and edits were made along the way in an effort to constantly improve the programming and artwork. But allowing that sort of design fluidity created a number of ancillary challenges:

» ***Communication*** When you're not working from a rigid design document, communication within the team is more critical than ever. We were working remotely at times and it is amazing how much difference it makes when you can talk in person as opposed to via e-mail or Skype. It is easy to make assumptions or misinterpret things that would probably be quickly resolved by a simple conversation. Overall, the occasions on which we were able to sit down and hash things out were productive and important to the development of the game.

» ***Prioritization*** It is always tempting to add one more cool little thing to a game, but you have to make sure you're focusing on the things that really need to be accomplished before you start throwing new ideas into the mix. We also created a lot of art that was unnecessary (enemies that never made it into the game, for instance) because it was "in the plan"; but if it had been created on an as-needed basis, we probably could have saved some time in the long run.

» ***Perspective*** It is really easy to get tunnel vision when you're working on a single task, so it's important to pull back and get a sense of how things look as part of the whole. What looks awesome as a standalone piece of art or code may not necessarily fit in, so you need to ensure that what you are working on is consistent with what has come before. This is especially true with the art and animation: You need to make sure that when you drop new art into a screen with all of the other assets present, it is aesthetically seamless.

Overall, it took about a year to build the game from concept to release. Without a team that cared about the project and the story—and that worked well together—we could never have done it.

## Publishing Dilemma

To date, we have been lucky to find publishing partnerships that have consistently resulted in a win-win for both sides. In our studio, the greatest obstacle to creating our own IP is finding the funds, or rather the guts and funds, to try something new. As a studio that does both work-for-hire and work inspired internally, we have a constant struggle to pick partners who are right for us and for our audiences.

My first inclination was to approach a partner with the *Sasquatch Survivor* idea to minimize our risk, but the concept was so original I did not think it would fly. Taking a chance is something I rarely do, but in this case, I was compelled to. I have no regrets. Taking calculated risks is what life and business are all about. Even if the game doesn't make a dime, I am happy I took the chance—and I'd do it again in an instant.

## Mimo's Future

My hope is that this game will have great success and can develop into more than just a game. I would like to see our character spin off into toys, a TV show, and clothing. And of course we want to build the sequel. Will this happen? We do not know. But we do know this: The game is really fun to play. You can find it at www.sasquatchsurvivor.com, the Chrome Web store, and on Google Play. ❊

# Focus on Platformers – *Little Acorns*

by Andy Gibson;
*Co-founder, Team Pesky;*
**Derby, United Kingdom**

continued from page 27

### A Metacritic score of 80

With well over one million sessions played in the first month alone, *Little Acorns* has since been commissioned for Windows Phone by Microsoft, with an Android port on the way as well. Which, perhaps, begs an obvious question: *How did such a simple idea turn into such a successful game?*

I spent a lot of time deliberately looking outside video games for influences because I specifically wanted the game to look like a long-lost Saturday morning cartoon.

### Goodbye "Mr. Squirrel"

It took me about a year of spare time (and a lot of support from colleagues) to finally have a working platformer I could submit to Xbox LIVE Indie. But before I could submit it, by chance I reconnected with Dave Reed, a former colleague who had a very playable demo that included rope swinging, and putting the two together, we quickly had something we both were ready to commit a few months to finishing (http://www.youtube.com/watch?v=NFNFsFBs5DU). Dave had already written an editor and was using Airplay Marmalade for iOS builds. We agreed to a feature list and divided up the remaining work, Dave working full time independently and me in spare time outside my 9-to-5 as an art manager and director. Team Pesky was our "working title" for the collaboration.

We ditched the name *Hurry Home, Mr. Squirrel!* as there was already a *Mr. Squirrel* game in existence. *Little Acorns* was next on the list. From Day One the game was all about charm. All we aimed to do was make it simple and make it beautiful. The art style went through several versions before we settled on the current look. I spent a lot of time deliberately looking outside video games for influences because I specifically wanted the game to look like a long-lost Saturday morning cartoon. The theme of the passing seasons, the motif of providing for your family, the character designs for the enemies—even the sound effects music—just fell into place once the art direction was established. We aimed for a consistent tone across every facet of the game, from the logo and front-end to seasonal backgrounds.

I guess *Little Acorns* started out as *Hurry Home, Mr. Squirrel!*, which in turn started out as a drawing by my then four-year-old son, Luke.

We felt the game had immediate appeal. It was enjoyable right from the start, and its progress system (collecting acorns) gave it sufficient depth and a straightforward means of unlocking new levels. We also provided bonuses to anyone who successfully collected all of the acorns on a given level. To add further challenge, we implemented a speed-run target as well. We also integrated leaderboards and achievements via Apple's Game Centre.

### Publisher or Self-publisher?

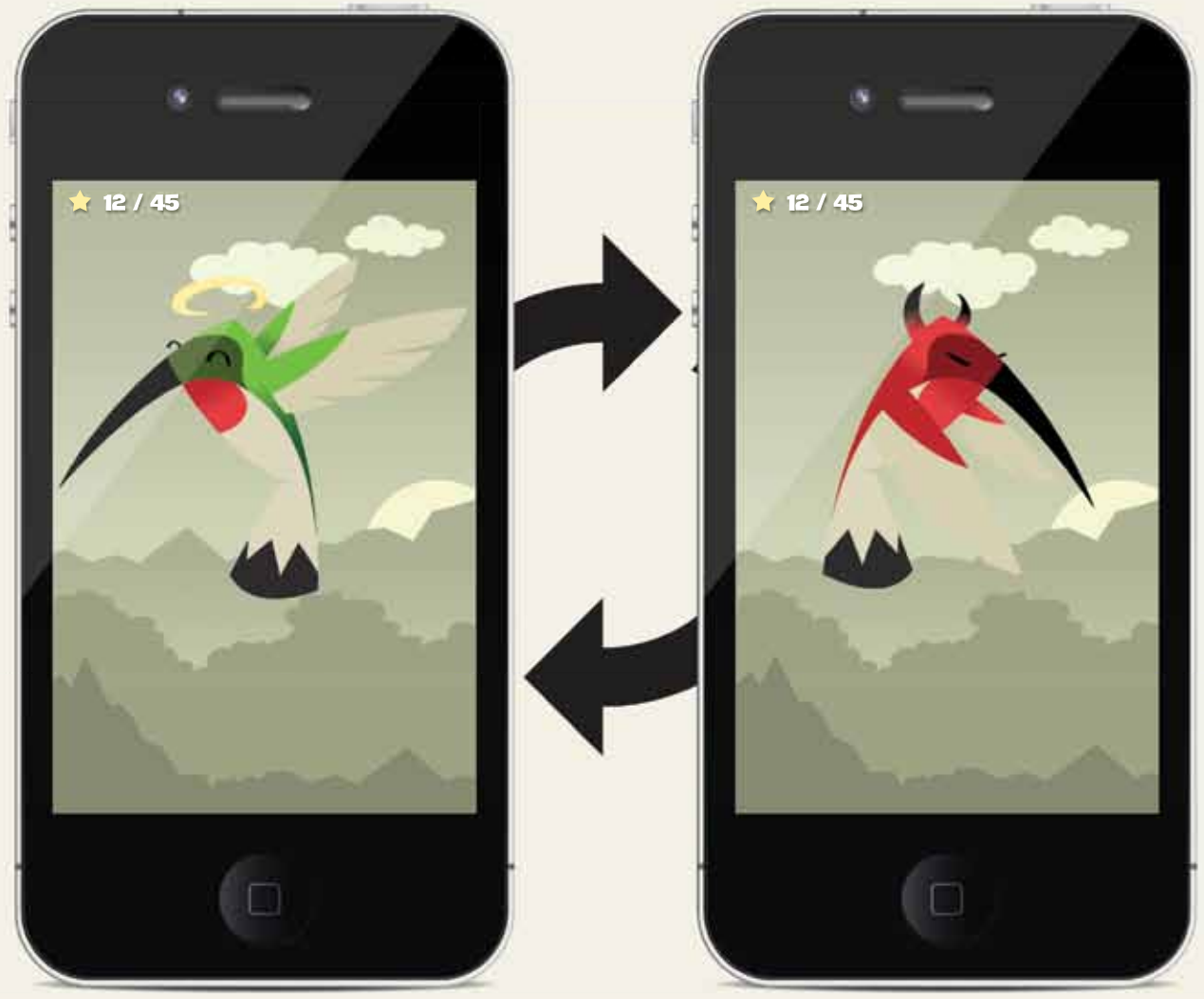
Having experienced more than one occasion when the developer/publisher relationship failed and no one got what they wanted, our biggest decision was whether or not to approach a publisher. Keeping the IP was a must, but all the work involved with self-promotion seemed too much of a risk. Ultimately, we decided to approach publishers and see what was on the table.

We sent a build and cover letter to Chillingo and had an offer of a contract extremely

swrve™

Option A

Option B

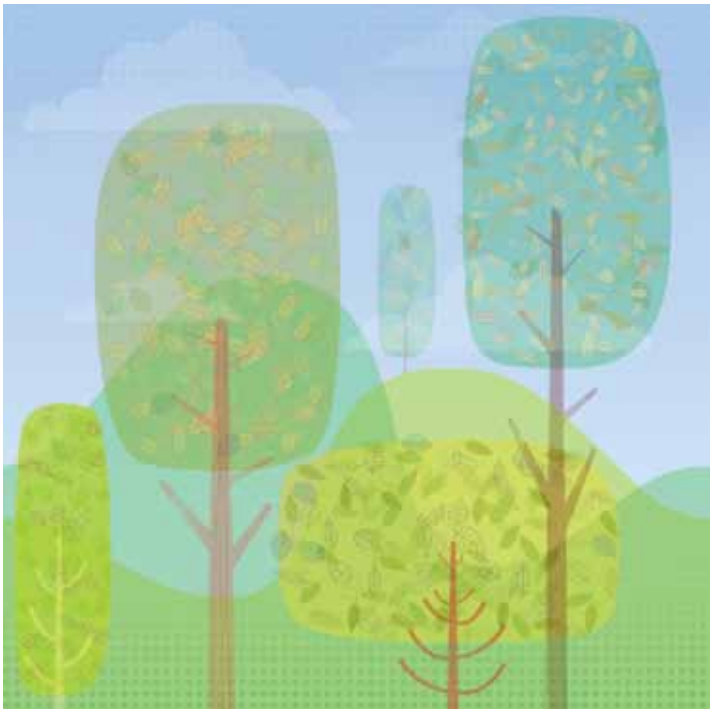



# Real Time AB Testing Platform for Mobile Apps.

No code or new app versions required.

www.swrve.com

# Focus on Platformers - *Little Acorns*



quickly. (In retrospect we should probably have approached other publishers to create some leverage.) This might seem pretty unbelievable, but we spent nearly three months with Chillingo, reworking and polishing what we felt was a very playable, casual little game. Tom Kinniburgh was assigned as our dedicated producer and was very sympathetic to our aims with *Little Acorns*. His feedback and support in organizing focus test sessions proved invaluable in ironing out creases in the UI, balancing content and improving user experience.

The only bone of contention came with the issue of in-app purchases. We had not designed any micro-transactions into *Little Acorns*, so when Tom suggested that we needed to consider monetizing the game beyond the app price, we didn't have a thorough plan on how best to implement this. The Flurry data we're seeing now tells us there's less than one percent click-through on the two IAPs (unlock all levels and unlock all customizations). When designing future games, we'll definitely be considering how to integrate IAPs centrally—from Day One—since the free-to-play model seems to be increasingly dominant.

## Testing Means Perfecting

We'd done as much play-testing as we could before sending a build to Chillingo. Real testing. Honest testing. Testing where we'd just watch people play the build without even frowning when they died! We wanted to create a game with real charm that pulled players in and held their attention, offering just the right balance of challenge and reward. A lot of the initial feedback was very positive, but Chillingo helped us with some further focus-testing and reported that a lot of players just didn't get the core mechanics. For example, they collected enough acorns but didn't realize the exit was unlocked. Or worse, they got frustrated trying to find the exit. Or they didn't know there was a timer until they'd run out of time. (If you've never practiced "dumb testing," as we called it—watching players from the opening menu to when they put the game down—then try it now. It can be a sobering experience.) The revisions we made as a consequence of this testing were crucial to the critical success and great reviews we finally received.

In addition to focus tests, we integrated Flurry analytics into *Little Acorns* and are still tracking the data daily to build up useful metrics on how many sessions people play, how long those sessions last, which levels get the most play, etc. I can't express how important it is not just to collect this data but to react to it during development and with post-launch updates. The potential for live updates to browser-based games using live analytics is pretty exciting. Plus the data is a great sales tool in pitching ideas for future funding.

It was around this point that we realized that creating the remaining 60 levels of *Little Acorns* would take longer than we'd planned. Enter Rich McClaughry, a very experienced designer and producer with whom Dave and I had worked before. Rich had played the

# THE BIGGEST APP DEVELOPERS USE THE BEST ADVERTISING & DATA PLATFORM

Millennial Media is the leading independent mobile advertising and data platform that's powering the app economy. To start monetizing and advertising your applications, visit **mMedia.com** today!

mMedia™

POWERED BY millennialmedia
the mobile advertising & data platform®

©2012 Millennial Media. All rights reserved. All trademarks or registered trademarks are property of their respective owners.

# Focus on Platformers - *Little Acorns*

Having experienced more than one occasion when the developer/publisher relationship failed and no one got what they wanted, our biggest decision was whether or not to approach a publisher.

build and offered to take on as many of the levels as we'd give him. Having fresh eyes on the level designs helped highlight the rate at which we introduced new features (for example, different enemy behavior). Spreading our features across the game at the right rate was critical to encourage players to keep playing—something we watch carefully when planning further versions.

### Get Your Squeak On!

*Little Acorns* first appeared on the top banner on Apple's App Store on February 16, 2012. Even though we'd deliberately avoided setting targets for fear of disappointment, initial sales were way higher than we'd expected.

So has *Little Acorns* been a success? Chillingo pitched the idea of an extended port with unique content to Microsoft. The iOS reviews were very positive. The sales are better than we could have hoped for self-publishing. And tens of thousands of players are enjoying it daily. Some have even finished the game—no small feat considering it involves collecting every acorn and every fruit on every level while also beating the speed-runs. We've had nearly two million sessions, suggesting there's an appetite for a few more acorns yet.

Work With Us, & Gamers Will Thank You.

VMC Game Labs is the world's leading Games QA & Support company. With thousands of professionally trained engineers around the world, we ramp and scale better than anyone else, providing QA & Test, Localization & Translation, Game Mastering & In-Game Support, and Mobile Services for publishers and developers around the world.

Let us help you get a better game to market, faster.

www.vmcgamelabs.com

VMC GAME LABS

The World's Leading Games QA & Support Company

# THIS IS OUR GAME FACE.

*We turn hit shows into hit games...and we're just getting started.*

©2012 A&E Television Networks, LLC. All rights reserved. 0711D.

## TAKING HIT TV TO THE *NEXT LEVEL.*

A+E NETWORKS™ | GAMES

A&E · lifetime · HISTORY · LMN · bio. · H2 · crime & investigation network · MILITARY HISTORY · Lifetime Real Women · HISTORY en ESPAÑOL

# Kickstarting a Business with a *Golden Boot*: Nekki

**COMPANY:** Nekki
**FOUNDED:** 2002.
**OFFICES:** HQ: Moscow, Seattle, Fürth Germany
**EMPLOYEES:** 50+
**PORTFOLIO:** 14 Games in 10 languages

Dmitry Terekhin, *CEO*

It was in Dmitry Terekhin's second year of his university studies that he founded Nekki. His first project was a browser-based soccer game, *Golden Boot,* but shortly thereafter his company launched the very popular soccer manager, *11x11.* Since then, Dmitry has guided Nekki to success with many new games and successful non-game projects on various platforms and in new global markets. Nekki's next venture is *Vector,* a new parkour game aimed at the global, mobile market. David Nixon sat down with Dmitry to talk about the student project that turned into the passion of his life.

**NIXON:** ***Tell us about your company philosophy and values.***
**TEREKHIN:** Our mission is to make the world a more interesting place. We strive to create unique, compelling products that inspire people and brighten their lives. Our core values are:

- passion
- innovation
- freedom
- optimism
- commitment to growth
- commitment to act

We want to be free to do what we love with real enthusiasm and to foster a creative desire. We work to grow, to excel at our jobs and to reach new heights of accomplishment. By focusing our efforts, inspiring positive emotions in ourselves and our users, we make the world a little better each day.

***What's it like to work at Nekki?***
Nekki is a very friendly, informal place. I often say my team is like my second family. We actively avoid bureaucratic layers, working to overcome challenges collaboratively and quickly. Nobody hides in private offices: Even the founders and senior managers work in shared spaces. We all sit together, and we love it! Even though we maintain a clear division of responsibilities, I always encourage everyone to be aware of our team's overall objectives and to take initiative to help reach them—even if it isn't really "your job." We encourage everyone to try their hands in new areas of interest or passion so they might contribute to Nekki's success from a variety of directions. Learning, growth, and expansion of responsibilities are hallmarks of the Nekki work experience.

When hiring new employees, I look for enthusiastic people who love their work and possess an underlying iron determination to turn that passion into action and results. Oh, and they should be nice too. As I said before, our team is a close-knit group. Positive, friendly optimism is key to maintaining that "second family" feeling which defines Nekki's team culture.

***Your company started with a couple of soccer games. Are sports games a key theme for Nekki?***
We did start with two soccer managers called *Golden Boot* and *11x11*. However, over time we have diversified considerably. We made *Gladiators*, which recently celebrated its fifth year of operation, and a social game called *Shadow Fight* which has reached more than 20 million players. And we constantly expand our areas of activity, primarily as the result of new platforms to build on. We will still develop browser-based and social games, but we'll also spend considerable attention on projects for mobile platforms. We are preparing to launch *Vector*, a game based on parkour, for both social networks and

# NEKKI TIMELINE

**2002** Nekki launches its first project: *Golden Boot,* a free MMO Soccer manager game

**2004** A new version of *Golden Boot* is released with enhanced artificial intelligence and actions processed by a graphic 2D renderer.

**2005** Launch of Russia's premier soccer portal: Soccer.ru, which is still attracting thousands of soccer fans with the latest soccer news and leading online broadcasts of global soccer events.

**FEB. 2007** *Gladiators,* an online game in the ancient Roman gladiator fighting style, is released to the public. By September, *Gladiators* hits 100,000 registered players.

**JUN. 2008** Launch of *11x11,* one of Nekki's most successful franchises.

**NOV. 2009** *11x11* wins second place in the National Web Awards in a category "Most Popular Website."

**DEC. 2009** Launch of the browser-based game, *Banana Wars.*

**MAY 2010** *Ice Kings* hockey manager launches with tournaments, championships, promotions, and prizes.

**SEP. 2010** Nekki pioneers a new genre of pet/performance management social game with the launch of *Happy Circus.*

**JAN. 2011** Launch of a new social network *Mylife*—a platform for social games and socializing.

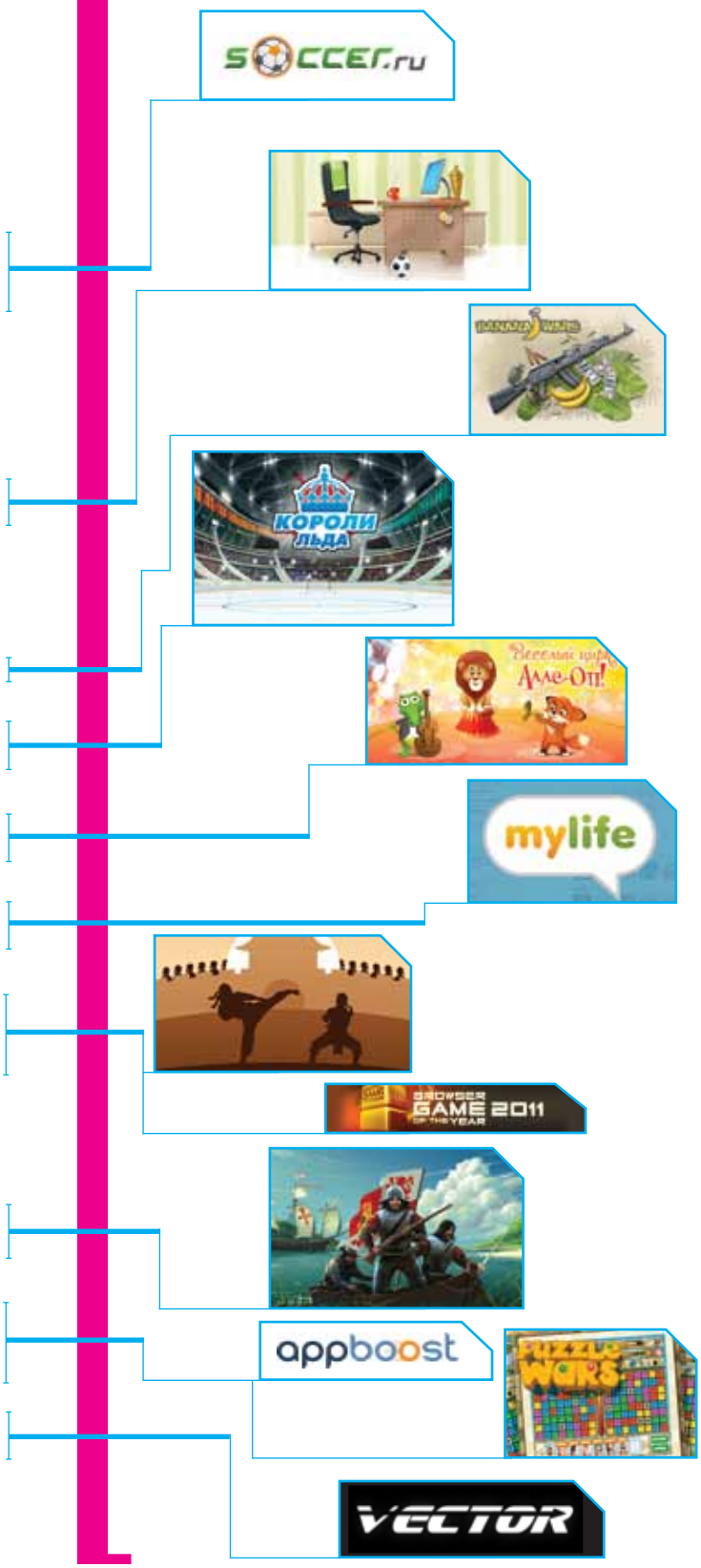
**FEB. 2011** Launch of *Shadow Fight,* which allows social network players to fight with friends in an arcade-style fighting game. *11x11* is recognized as the 2011 Browser Game of the Year.

**OCT. 2011** *Shadow Fight* exceeds 15 million players around the world on six social networks.

**DEC. 2011** Nekki announces the development of a new browser game, *Colonizers.*

**APR. 2012** Nekki signs a publishing agreement with iLogos to publish and distribute *Puzzle Wars* in several international social networks. Launch of a new cross-promotion tool AppBoost.

**MAY 2012** Nekki introduces an arcade style adventure game *Vector.*



# Nekki

*Gladiators:* free to play online game in the Ancient Rome setting

smartphones. We also continue to develop non-game properties such as our soccer news portal—Soccer.ru—and new services like a cross-platform traffic exchange system for social games called "Appboost" (www.appboost.com), which fills an important need for cross-platform traffic exchange to optimize audience value for us and for our partners.

When choosing ideas for new products, we try to build on our staff's passions. If someone really loves a certain theme or topic, and has long dreamed of making a game about it, we are as close as possible to guaranteed success.

***Sounds like you have a lot going on! How do you come up with new projects and set priorities?***

When choosing ideas for new products, we try to build on our staff's passions. If someone really loves a certain theme or topic, and has long dreamed of making a game about it, we are as close as possible to guaranteed success. Such passion fuels the creativity, innovation, and hard work that make success possible. We believe that players gravitate more strongly towards more innovative experiences—and so far we have the positive results that bear that out. We aren't completely driven by our passions, though. With so many great ideas to choose from, we prioritize them by paying attention to the desires and preferences of our audience and regularly gather focus groups to test our ideas.

***You're based in Russia. Have you had any difficulties doing business abroad?***

The company's foundation comes from our "home" players in Russia, but income from overseas is growing in importance for us as we expand. One of the most obvious difficulties is that the rules change radically as you move from region to region. For example, in Russia, Vkontakte and Odnoklassniki are dominant distribution sites, but elsewhere Facebook is the place to be. Though they look similar, Vkontakte and Facebook are very different environments. Facebook's business terms for developers are much better than Russia's leading networks, but it is quite expensive to drive traffic. Succeeding in a foreign market takes a tremendous amount of commitment, but I believe that all the effort will pay off.

***How did you meet your business partners and decide to start Nekki?***

I've wanted to make games since I was a child. Until I was in my second year of college, though, it was

# Do you want to monetize Latin America?

## Coverage & Usability

- Massive physical and digital presence to reach Latin American's online population through more than 650K Points of Sale
- We minimize taxes in the region, and help you receive your profits wherever you are

## Your One-stop shop:

- 40+ payment methods
- increase conversion rate, and minimize taxes in the region

## Experience & Security:

- 4 Million registered users, 650 transactions per second

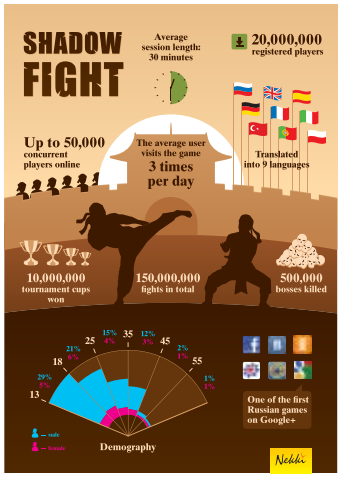
paymentez

**Way more than just a payment provider!**

/paymentez @paymentez http://corp.paymentez.com

BIGPOINT UBISOFT facebook zynga Aqlix ULTIMATE GAME CARD playfish

# Nekki


SHADOW FIGHT
Average session length: 30 minutes
20,000,000 registered players
Up to 50,000 concurrent players online
The average user visits the game 3 times per day
Translated into 9 languages
10,000,000 tournament cups won
150,000,000 fights in total
500,000 bosses killed
Demography
One of the first Russian games on Google+
Nekki

Online games move fast. This makes it very hard—perhaps even impossible—to maintain up-to-date design documentation. It's not the easiest or most predictable way to develop games, but we believe it's necessary to operate this way in today's fast-moving online game environment.

just a dream. That year, I played a little soccer game on the Internet. The owner of the game didn't have enough time to support it properly, but he knew and trusted me, so he turned operations over to me. He had abandoned the project and was no longer involved in development, so I took it on myself, created the site, and bought the domain name. Suddenly we had our first game, *Golden Boot*. Gradually we had more new ideas and these turned into new projects, and before you knew it I was recruiting staff. Among my earliest recruits were two very talented programmers: Dmitry Zharov and Evgeny Dyabin. These guys are still with me, working hard every day filling crucial roles on our projects. Today Nekki employs about 200 people, with 40 on staff and many others working remotely as consultants and contractors.

***What are your thoughts on player engagement and community development?***

As the number and size of the games we operate has grown, player feedback has become more and more important. We believe our community reputation is critical to our continued success, so we set ourselves the task of treating users well and providing solid, polite, and engaged support. We put two-tier user support in place: first-tier agents who interact consistently and directly with our customers, and second-line advisers who are deeply versed in our games and the tools and technologies behind them.

Also, we created a staff position to head up our support efforts and developed a "code" for the first-line agents to guide their approach. The code looks like this:

- A message from a user is not a problem; it is an opportunity.
- Communicate with the user for as long as he or she desires.
- Our main principles of communication: courtesy, empathy, and a desire to help.
- An agent's end reward is heartfelt gratitude from a loyal customer.

Because we operate our games in Russia and abroad, we also hired a "local" business director both in Europe and in the United States to take care of those important markets. What's more, in Italy, Spain, Turkey, Brazil, Portugal, Germany and France we operate a team of volunteer community supporters led by an on-staff manager who is among the most active participants in our games. We reward

valuable volunteers with in-game bonuses. In total, we are helped by some 40 volunteers around the world who help us keep the pulse on what our players desire and need.

***Since you don't really believe in design documentation, how do you figure out what to do next?***

Online games move fast. This makes it very hard—perhaps even impossible—to maintain up-to-date design documentation. Games are updated regularly and often. This environment requires tremendous flexibility, speed, and responsiveness from the development team to adjust to a changing market and player demands. We communicate to our communities in near-real-time, watch their reactions to our innovations, and learn from their experiences. Then it's our turn to pivot quickly and deliver more and better functionality. For example, *Shadow Fight* originally had only unarmed fights, but right after launch *everybody* wanted weapons. With thick design documents and heavily structured development timelines, we might have missed an opportunity to quickly deliver an important feature to our players. It's not the easiest or most predictable way to develop games, but we believe it's necessary to operate this way in today's fast-moving online game environment. ❊

# DEVELOPERS!

# YOU MAKE THE GAME.

# INTERGI

## WILL HELP YOU MAKE THE

# MONEY!

## JOIN OUR DEVELOPER COMMUNITY

Come visit us at Booth 8G

intergi ENTERTAINMENT

954-418-0779 www.intergi.com/developers developers@intergi.com

Exclusive Interview

# "You Can Make Money from Making Games?"

## An Exclusive Interview with **David Perry**

*by Clelia Rivera, Casual Games Association*

Q&A

**CLELIA RIVERA: Not all of our audience knows your history, David. Would you give us a quick overview?**

**DAVID PERRY:** In 1980 Northern Ireland, there was really no such thing as a video game industry. I was making games back then in my bedroom and sending them off to magazines to be printed. It was exciting to be in print while just a student. The big surprise was that the magazine publisher sent me $600 in the mail. *You can make money from making games?!* Games were very simple; they were programmed in a language called BASIC and the graphics were just black and white blocks. While still in school, I received a job offer to move to England and work for a publisher called Mikro-Gen. After much shaking of heads by my teachers (to them video games sounded like a fad), I took the job.

The industry was growing quickly, and I was in the right place at the right time. To be clear, I wasn't part of the arcade side (*Space Invaders,* etc.), but rather computer games. The first licensed game I worked on was *The Teenage Mutant Ninja Turtles* (known in the UK as the "Hero" Turtles). The game went straight to Number One, and when you make a Number One game, people take more notice of you. That licensing strategy was something I enjoyed. I converted games like *Paperboy* and *Smash TV,* then started making original games (based on licenses): one for the first *Terminator* movie, *Cool Spot* for 7-UP, Disney's *Aladdin,* and *The Matrix.*

**What are your early memories of video games?**

I would play arcade games in local arcades, generally the common stuff like *PAC-MAN, Donkey Kong, Missile Command* or *Galaga.* I liked the less popular ones like *Phoenix* and *Moon Cresta,* but the airport had *Dragon's Lair,* and the sit-down version of *Star Wars Arcade,* which made it very, very worth the drive. The video game industry in the UK was very much computer-based (not so console-based), with Sinclair Spectrums, Commodore 64's, Amiga, Atari ST and Amstrad CPC 464's. Everything tended to come with a keyboard. When I first started, video game graphics were very basic, like you were either a blob or maybe the letter A; so as graphics evolved, my artistic weakness showed. I ended up partnering with Nick Bruty, who was a talented designer/artist combo. Video game audio was also very simple at the start— basically just beeps—but soon we needed help from real digital musicians like Matt Furniss and Jeroen Tel. Standards went up and the teams got bigger.

**When did you first know you wanted to work on games?**

When programming, there's a moment when you realize you can make just about anything. It's quite magical and inspirational as you get floods of ideas of things you could make. For me, that was the tipping point: when I stopped fighting with the programming and was able to focus on the ideas. In those days, programming was done in Z80, 6502 or 68000 assembly language. I liked that, because you were in complete control of the machines—no excuses. Back then, everything you did seemed fresh; you could innovate nearly every day. I started with just 1K of memory, which is just a puny amount of storage space. We then went to 16K and the whole world opened up. People literally started making flight simulators in 16K. To put that into perspective, the eBay logo is around 16K.

David Perry,
*Founder & CEO, Gaikai;*
**Aliso Viejo, CA**

*David Perry*

My first official job was based in Ashford in Kent (UK). My starting salary was around $5,000 a year. That showed I was either crazy, or I really, really wanted to get into the industry. Thankfully, my salary kept going up once my games started to sell. It's interesting how the industry keeps growing and growing. It's got an almost limitless potential. There is an awful lot of opportunity out there—that's what I love about it. There isn't anything holding anyone back, and we are now certain that people like to play games!

**You first became well-known in the game industry with the success of Shiny Entertainment. Can you talk some about those days?**

We got an offer to make a game for McDonald's called *Global Gladiators.* McDonald's didn't actually like the result because (we later learned) they wanted stores on Sega Genesis where you could buy virtual burgers and fries. It made no sense to me. As it turned out, our game ended up winning Game of the Year from Sega.

For our next game, we had the 7-UP rights and made a game called *Cool Spot.* Sega ended up publishing the game with Virgin Games. They then brought us Disney's *Aladdin.* This was the first time Directors had offered to work with the game team, and they delivered real Disney animation. That made a huge difference to the look of our game, and it was an instant hit. Seeing well over $100 million being made from a game, we started to think, "Maybe it's time to start our own company." Playmates Interactive Entertainment (the company that made the *Teenage Mutant Ninja Turtles* toys) decided to bet on us and fund the idea.

**Shiny appeared to come out of nowhere with the massive success in *Earthworm Jim.* Is that really what happened?**

My team was trying to get me to hire some guy called Doug TenNapel, I didn't know who he was, so we gave him a test to make a character and animate it. I remember seeing the test and being really impressed. And the timing was perfect: We were looking for a character to really get behind, and *Earthworm Jim* was exactly what we needed.

We actually considered a bunch of licenses before *Earthworm Jim,* including *Knight Rider* (based on the David Hasselhoff TV show which was popular then). We decided to make something new and bet the farm (literally) on *Earthworm Jim.* As the buzz increased, we licensed it out to lots of companies. It got its own TV show (made by Universal Cartoon Studios) and aired on the Warner Kids Network. We also got a comic book series from Marvel Comics, and Playmates made a toy line.

*Earthworm Jim* was the last video game I personally programmed. Slowly, I drifted over to the dark side (management), but I still loved that Shiny was known for taking risks and experimenting with new design ideas. But I could tell 3D was going to be the future and I worried about the transition. We had one of the best 2D teams in the world, people who were experts with pencil and paper animation. I knew that was all going to change. So I sold the company to Interplay.

Way too early, as it turns out. The team made the change to 3D very nicely by releasing *MDK.* The company grew as we took on more and more projects. This was a major mistake as everything became so diluted. Still, we managed to ship titles like *Wild 9, Sacrifice, Messiah* and *R/C Stunt Copter.*

Going back to the licensing roots, we got the rights to the Matrix movies, the hottest movie license possible at the time. To get those rights when all other publishers wanted them was a big deal. Atari stepped in and bought the company—and the game sold a lot.

**From there you became a consultant. Did you enjoy that?**

As a consultant, you get lots of offers to help companies sue each other, etc. That's not remotely interesting. Then you get offers to help in patent defense. I did do some of that in the past as I've seen everything over 30 years now, and it's fun to take down patent bullies. Acclaim was the most interesting customer, as they wanted to invest into free-to-play MMO games and this was still a relatively new idea. I went to Korea with the CEO of Acclaim to study why the MMO space there was booming even when there was major piracy. He ended up offering me a job at the company—so that ended the consultancy.

Consulting is a dangerous business. A lot of people will try to absorb your time for free.

When programming, there's a moment when you realize you can make just about anything. It's quite magical and inspirational as you get floods of ideas of things you could make. For me, that was the tipping point.

# David Perry

We had one of the best 2D teams in the world, people who were experts with pencil and paper animation. I knew that was all going to change. So I sold the company.

If you use the time well, by learning and visiting, then it is a lot of fun.

It's what ultimately led me to cloud gaming. In this digital future, how do you get people to play your games? What is the lowest friction way to discover and purchase games? I can't think of anything better than cloud gaming. If I didn't take the time off, and do some consulting, I might not have spent so much time thinking about the acquisition cost of players, which is life and death to free-to-play companies. I probably wouldn't have cared so much about reducing friction if it wasn't for flying to Asia. I think the message here is be open to your career finding its own path, but keep your mind open as options arrive.

### What do you think about the impact of casual games on the industry as a whole?

In the old days, when we had CD stores, there were a thousand CDs to choose from but one CD in particular (amongst the thousands) that was perfect for your DNA. I believe there is a video game for everyone too. I think it's a discovery problem. It's not the graphics or sound. I think it is distribution; it's helping everyone find that game as easily as possible. Casual games are absolutely critical because, for a big slice of the public, it's those games that strike a chord with them.

The problem is that we do a terribly lame job of getting our games out there. The great hit games (including *Call of Duty*) are generally not on your set top box, on your Digital TVs or Blu-Ray player or Tivo. So the only good, low-friction solution in my opinion is cloud gaming.

Casual games have demonstrated how valuable easy-access is. I'm all about ubiquity. I would love for dramatically more people to experience the best games our industry can make. We're doing our bit at Gaikai (http://www.gaikai.com/games) to make that happen.

### How do you think players have changed over the years?

I think we've always been the same. Some people play cards, board games, or video games. I think the game choices are getting better and better with higher quality. If anything, it's becoming too complicated, and it's turning people away from gaming. There is still a lot to do to solve the problem of making games more approachable and accessible. It is hard for the average person to pick up a 16-button controller and find out that's not enough buttons—that they will have to learn key combinations. Games need to be more accessible than that. As an industry, we are still learning and are not anywhere close to being done yet. It's the land of opportunity, and games like *Angry Birds* love to remind us of that fact.

### Why do you think *Angry Birds* and *Bejeweled* have been so successful?

I think all hit video games have three key things: skill, risk, and strategy. And all three have to happen at the same time. This usually makes great games. You can kind of feel one missing when it's gone.

Actually, here's my full list of traits that every good video game should have:

- ***Skill:*** You get better with practice.
- ***Risk:*** You know you can get an advantage if you take a risk (and there are plenty of opportunities)
- ***Strategy:*** There's more than one way to skin this cat (you need to decide and own the path you've taken).
- ***Challenge:*** You can see what your objective is (your challenge/goal is very clear).
- ***Progress:*** You can *always* see exactly where you are in relation to finishing a challenge.
- ***Blame:*** If you fail or die, you must *not* blame the game (it's your fault alone).
- ***Retry:*** You must be able to try again—instantly.
- ***Meter:*** There must be some way to *know* you improved (like a score or progress indicator).
- ***Immediate Feedback:*** When you do something good, it should be obvious (visual + audio matches effort).
- ***Nitrous:*** Add humor, which makes the subject matter timeless and interesting to both males and females.

Humor makes games more memorable. I don't think *Angry Birds* would be as successful without humor. Without humor, it is just *The Catapult Game.*

*Bejeweled* works on adrenaline. If there were no feedback effects, it wouldn't be as fun. The feedback effects reflect how impressive your move was. It wouldn't be as interesting without the emotional payback rewards for skill and strategy.

**When did you realize that the industry needed Gaikai?**

In 2008, it was inevitable. I couldn't think of any other way. I was funding a site called GameInvestors.com to help developers find projects. I was funding a site called GameIndustryMap.com (still live) and it was designed to help talent be discovered. I was also funding a site called PostCreativeProjects.com to help creative contractors interface more effectively with the game industry. I was also funding TheFanHub.com, which was a testing ground for new ideas on navigation and discovery paradigms. Gaikai ended up being the one I was most passionate about, so I put the brakes on everything else and doubled down. Someday I will get back to GameInvestors.com and finish what we started as the industry still needs it.

**What made you decide to write "David Perry on Game Design"?**

I'm a deconstructionist, I believe there are formulas to things. There is a sort of core set of things that a lot of the world works by. What are the tricks that designers are using? At an IGDA chapter meeting, I asked, "Can you invent a new weapon that's never been seen in a video game—*right now?*" That was tough. I then listed every possible way to die. After that, everyone in the room had an original idea.

The DNA of the book was to let you springboard off ideas to make new ideas that had never been seen before. The book removes the designer's block. It was an impossible amount of work, and impossible to write alone. I asked Rusel DeMaria to help me, as he'd published over 60 books. At over 1,000 pages, I think it is the biggest book on game design ever written. If I was retired, I would be working on trying to open-source, then crowd-source this book in some kind of new online format we'd have to invent. It is very useful for students.

**What do you think about the way the games industry has evolved, first from retail to digital distribution, then from products to services?**

It's the way the world is going—like the popularity of CDs changing to the popularity of MP3s. It's all about becoming lower cost and much more convenient. Instead of paying for each disc or song, you just pay for service, like Netflix or Spotify, or it's free and you just pay when you love it.

**Some people are predicting the death of game consoles within 2 years. Do you agree?**

No, I don't think so. I think game consoles are going to stop being called consoles. They are going to be entertainment hubs. Sony is running ads: "It only does everything." Microsoft just added Xfinity to their console. Online media boxes could do everything if the console companies make them that way. Remember that games are responsible for *Call of Duty,* the biggest entertainment launch in history, and most of the other "entertainment devices" didn't participate.

**Do you think the pace of change is accelerating?**

All of the tools we make now are going to change things in the future. It's an accelerating curve. Better tools will make better tools in the future. So yes, I think you will see more disruption and innovation than ever before. I also think more people will be playing games than ever before.

**Successful people often develop their own guiding principle. What's yours?**

"If you're not in, you can't win." Simple as that. It makes decisions very easy.

It's like that game design list I gave earlier—only in reference to your real life. You need to decide how to use your Skill, take Risks, have a Strategy, and so on.

**Do you have any final words of advice for new game industry entrepreneurs?**

Think of the game industry like a train that gets faster each year. You may choose to get off (and take on easy projects), but the train will keep going without you. It's dangerous to get off that train. Think carefully before burning years of your career on stuff that doesn't matter. If you're not innovating or learning, I'd rethink your strategy. Hunt down a company that's doing something interesting. Do you have a job or a career? If it's a career, what are you doing each day to make it accelerate?

Be impatient! ❊

I think all hit video games have three key things: skill, risk, and strategy. And all three have to happen at the same time. This usually makes great games.

Join our team

GAME:DUELL

## *"Our Expertise"*

Our passion for high-quality games and a thrilling user experience has made GameDuell the leading cross-platform social games community in the world. We are providing social games via multiple platforms on the web, on social networks and mobile. GameDuell was founded in 2003 and is now available in 7 languages. Our community includes more than 80 million registered members and installs from all over the world.

We have developed more than 60 flash-based games in our own studios and embedded them in a unique tournament platform that enhances social gameplay. The company is driven by a team of over 180 game-enthusiasts and has offices in Berlin and San Francisco.

We are looking for passionate and friendly candidates who want to make a difference in the world of games. We are a highly-qualified, dynamic and professional team and offer an inspiring work environment in our loft office in Berlin-Mitte. Seize this opportunity and join us!

## *"Company Facts"*

| | |
|---|---|
| Team: | 180+ team member from over 16 countries in offices in Berlin and San Francisco |
| Games: | 60+ casual games (Cleopatra's Pyramid, Fluffy Birds, Bubble Speed, Jungle Jewels) developed inhouse |
| Revenues: | Transaction, subscriptions, sponsoring, virtual goods |
| Marketing: | Over 1.000+ international partners, portals and sites worldwide |
| Crossplatform: | Own online games web-portal www.gameduell.com, Facebook, iPhone, iPad, Android. |
| Customers: | More than 80 million registered members and installs |

***Bubble Speed***

***Jungle Jewels***

***Fluffy***

***Maya Pyramid***

**www.gameduell.com/jobs**

# Lie Detectors and Paper Beasts

## A Casual Tale of Biometric Design

As an architect and a game designer, I believe that one of the most fascinating aspects of creativity is its richness: the fact that human expression can be interpreted and understood from a number of different, layered perspectives. I find this to be especially true of digital entertainment, where meaning, messages and ideas can be conveyed in a multitude of ways, including—notably—the interaction between the player and the videogame system. As a practical example of such richness, and in order to introduce the work we have done pioneering the application of biometric methodologies in the development of casual games, I refer you to *Gua-Le-Ni; or: The Horrendous Parade*, an action-puzzle casual videogame for the Apple iPad, developed in collaboration with Double Jungle in Padova, Italy (www.gua-le-ni.com).

Feeding the beasts briefly interrupts their stampede, but can also modify their composition, quell their acceleration or increase their point value.

### The Horrendous Parade

*Gua-Le-Ni* has a unique setting as it takes place on the wooden desk of an old, befuddled British taxonomist. On this desk lies a fantastic book: a bestiary populated by impossible, finely drawn animals. Not unlike the monsters of myths and folklore, *Gua-Le-Ni*'s impossible beasts are combinations of parts of real animals. To understand what I mean, it might help to think of fantastic creatures like the sphinx, the Minotaur, chimeras or even *South Park*'s *Manbearpig*.

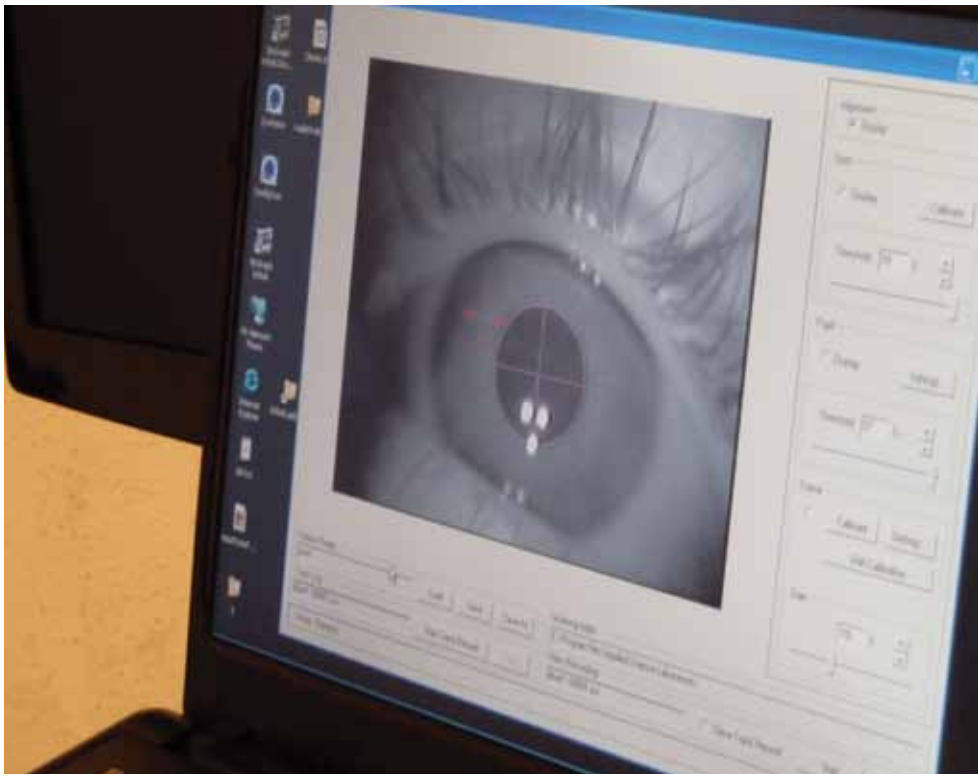
The animals are not stationary: They wobble across the book's illustrations. The paper animal depicted walking in *Picture 1* is a Ca-Bit-Dor-Ster: a four-part beast with the head of a camel, one body part of a rabbit, another of a condor, and concluded by a lobster tail. Such combinatorial monsters will walk across the pages of the bestiary one after the other until one of them manages to escape from the book. The main goal of *Gua-Le-Ni* is to recognize the components of the fantastic beasts and their relative order before one beast manages to flee from the page. Mentored by the old taxonomist, the players pursue this purpose by actively manipulating toy-cubes with animal heads and bodies on their faces.

As with any form of human expression, a game can be understood from several perspectives. From a strictly logical point of view, *Gua-Le-Ni* is a feedback system meant to engage the player with different pattern-recognition mechanics. From a personal standpoint, however, the game might be viewed as a way for me to bring to life the memories of when my mother used to go through books of etchings of fantastic animals with me. From a strictly academic point of view, *Gua-Le-Ni* is a creative artefact that complements my doctoral dissertation, exemplifying the possible use of videogames for the explanation, testing and development of philosophical concepts, including David Hume's understanding of the imaginative capabilities of the human mind.

Seen from yet another angle, the game is an experimental title that was structured to be used as the benchmark for scientific experiments conducted at NHTV Breda University of Applied Sciences (the Netherlands). For the sake of the audience of *Casual Connect*, this article will focus on this last aspect, as my game has also broken new ground in introducing a biometric approach to game design in the casual sector of the games industry.

Marcello Gómez Maureira wearing the complete set of sensors that were used in the psychophysiological experiments.

by Stefano Gualeni; *Professor of Game Design, NHTV Breda University;* **Breda, The Netherlands**



Has anyone watched *Blade Runner?*

### About Biometrics

When asked what biometry is, I usually find it useful to provide a practical example that the reader is likely to have some familiarity with: that of a lie detector. A lie detector monitors and records bodily changes in a test subject over a certain period of time. Biometry is the process of using these dimensions to give an objective account of the test subject's internal state variations. In other words, by measuring how one's body reacts to a certain experience (which could be a set of questions, or the screening of an advertisement, or a videogame session), biometry can approximately determine one's level of concentration, anxiety, fear, stress, and so on.

Hooking your game testers to our lie detector-like setup provides valuable insights about how playing your game affects those playing it (while also providing amusement to the rest of the development team). By monitoring (for example) changes in heart rate, the conductivity of skin, respiration, and the contraction of certain key facial muscles, you can obtain objective answers to questions that otherwise might be answered only subjectively and partially by traditional quality assurance procedures. For example:

- Is the initial speed of our videogame too high?
- Did we reach a climax in emotional involvement where we intended (likely at the end of our free demo)?
- Does the tutorial of our videogame succeed in keeping players engaged while empowering them to perform well?
- How does our target audience feel during their first game-over?

With the aim of structuring a methodology capable of answering similar questions with the added perspective of biometry, we started to run tests on *Gua-Le-Ni*. The resulting psychophysiological analysis complemented a wider quality assurance campaign that also included questionnaires, interviews, blind-testing and hard-core performance tests.

### The First Set of Tests

The first tests we ran on *Gua-Le-Ni* focused on its accessibility during the first few minutes of gameplay (the game being maximally inviting and non-threatening). In particular, the question posed by the development team that structured the first group of tests was: What would be the optimal initial speed of the beasts in the game's competitive mode?

The initial speed was, in fact, the basic variable regulating the difficulty of the game at its first impact with the players after the tutorial. In this sense, the results of the first test became a cornerstone for all the subsequent tuning decisions.

We ran parallel tests on two slightly different versions of the game: In the harder version, the beast crossed the screen rapidly (in 24 seconds), while in the easier version the beast crossed much more slowly (in 30 seconds). When we analyzed testers' stress patterns and correlated them with in-game questionnaires, we found that, compared to the harder version, the easier version created fewer signs of stress on the participants.

**Hooking your game testers to our lie detector-like setup provides valuable insights about how playing your game affects those playing it (while also providing amusement to the rest of the development team).**

Each dot represents a beast. | **Blue beasts** walk at basic speed. | **Red dots** indicate beasts that were wobbling faster than the basic speed | The **vertical line** represents a game-over at which the game resets.

*Figure A*

Shows how tense or excited a test subject is by tracking the variation in moisture of his or her skin.

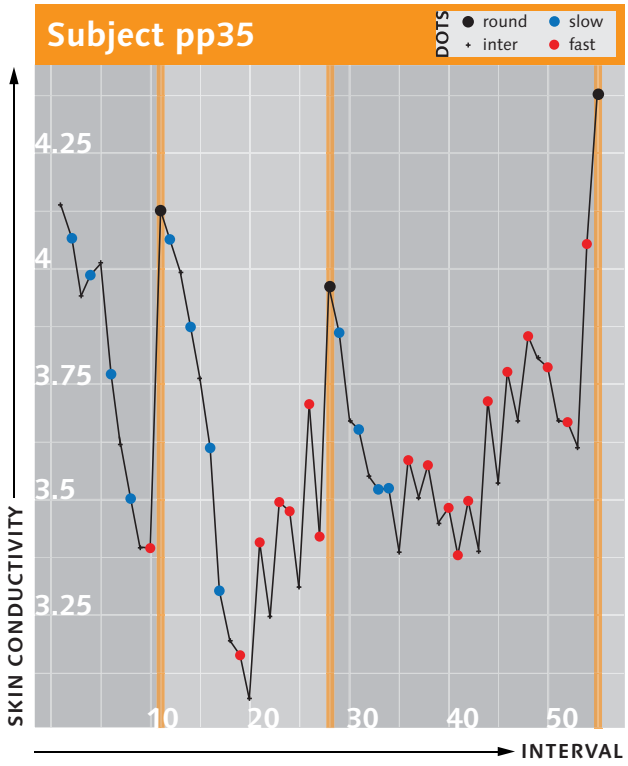
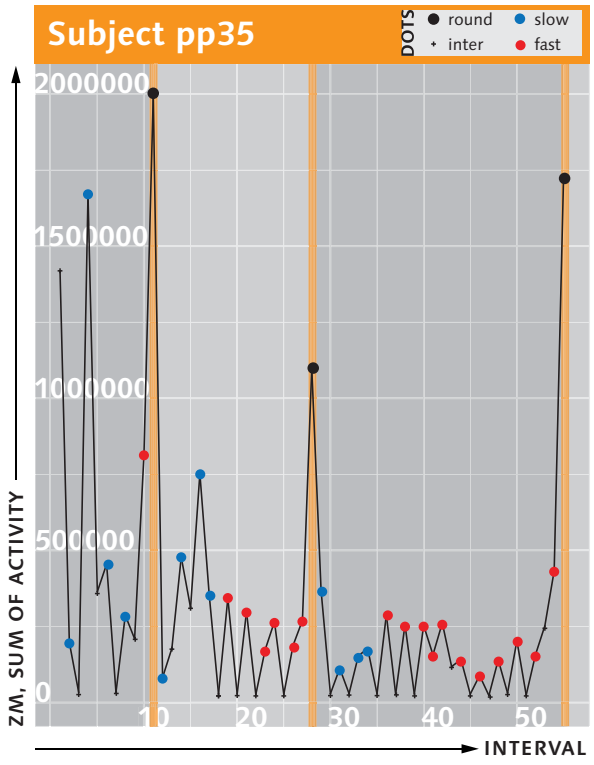



*Figure B*

Displays the activity of the user's smiling muscles during the same play session.




Even in the slower version of the game, however, the recorded stress levels were much higher at certain points than at others—still too high for players to simply enjoy the game. We could infer this outcome by combining the biometric data with the self-reported ones. Having received and discussed the results, we set initial speed of the beta game to 34 seconds. We further refined the game after the second set of tests to the initial speed value of 36 seconds, with which it was released.

A particular consistency in the game-over pattern also highlighted difficulties for most testers in recognizing specific animal parts. As a result of such observations, the graphics for the beast-pieces in question were refashioned. In addition, we picked the lobster as the beast to be used as an example in the tutorial to allow players to familiarize themselves with its components as early as possible in the learning curve of the game.

### The Second Set of Tests

The second test took place two months after the first one to help the team understand how players' performance develops in the first ten minutes of the game-play. (It is important to mention that in the competitive version of the game the animals' walking speed increases stepwise after a certain number of correctly recognized beasts; the design idea at the base of it is that, if not properly fed, the beasts grow hungrier and more frenzied.) In this phase, the development team wanted to perfect both the initial speed of the game and the acceleration rate as players advance. Specifically, we wanted to learn the following:

- Does the game allow players to be proficient enough to endure play-sessions of five minutes after three or four games?
- Does the game make players excited but not anxious?
- Do players have a positive reaction to the reaching of the game-over state (which needs to be perceived as fair and encouraging)?

*Figures A* and *B* show results for one of the fourteen people that were tested in this second set of experiments. Each dot in the graph represents a beast. Blue beasts were walking at basic speed. In the tested version, the beasts' acceleration (hunger) occurred every four specimens. The red dots indicated beasts that were wobbling faster than the basic speed. The vertical line represents a game-over at which the game resets.

*Figure A* tracked a dimension called Skin Conductivity, which gives a basic understanding of how tense or excited a test subject is by tracking the variation in moisture of his or her skin. *Figure B* displays the activity of the user's Smiling Muscles during the same play session.

PayPal℠

# CREATE GAMES.
# GET PAID.
# IT'S THAT SIMPLE.

We'll handle the payments so you
can spend time making games great.

That's what our first set of tests looked like.

These graphs show how at the very first play session, test subject 35 managed to correctly categorize all of the beasts at the basic speed but failed at the first acceleration (played for about two and a half minutes). Already a success, at least in terms of the development team's aspirations! The two following game-play sessions show a gradual improvement in performance, which keeps excitement slightly growing, only reaching extremes when reaching the game-over state. Another interesting observation that can be derived from the tracking of the skin conductivity of subject 35 is a growing capability to deal with complexity and speed, reaching a four-minute game-play session at subject 35's third attempt. The combined test results showed a game experience that, in terms of duration and intensity, was suitably in line with the developers' intentions. However, the combined reading of graphs and questionnaires encouraged the designers to make the game still slightly easier. As a consequence, in the released version, the curve by which the beasts accelerate was sensibly lowered and smoothed.

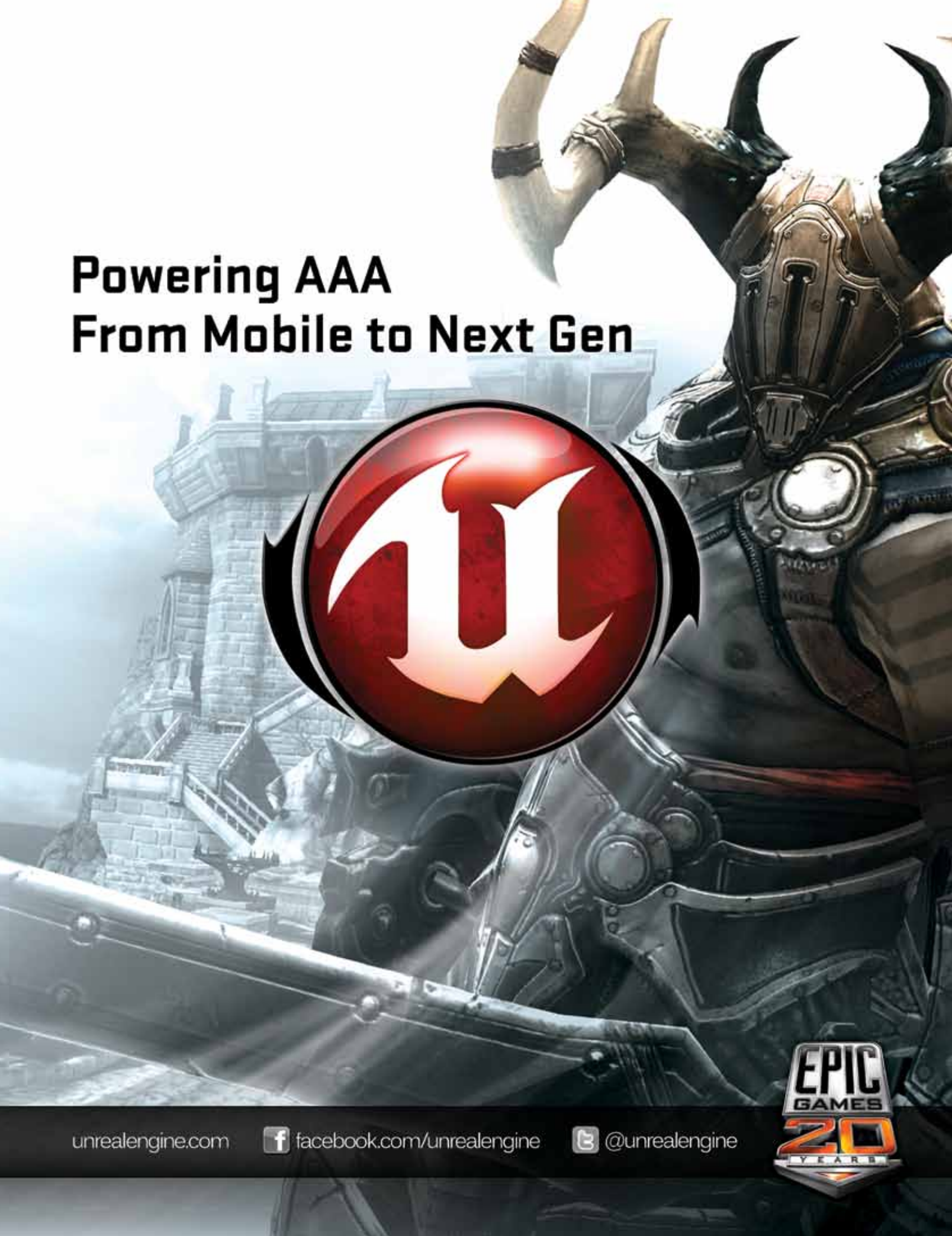
**Because academic interest in biometrics continues to grow, and since biometric equipment is fast becoming less expensive and more portable, the future is promising for both biometric and biofeedback applications in casual games.**

From the graphs in *Figure B*, it is evident that the players always met the game-over state with a smile. Using this information in combination with post-play interviews, we inferred that such smiles were due to the fact that players were allowed to manipulate the cubes and attempt to solve beasts until the very last pixel of their tail is visible. This design feature generally gave players the feeling of "having almost made it" and encouraged them to replay with a positive attitude. Moreover, the smiles' patterns indicated that players found the beasts with evident size disparities between their heads and their bodies quirkier. The "wart-dor" and the "rab-pus" were the ones which elicited the most smiles. Nothing was done with this information in terms of design, although in retrospect we could have made those beasts more frequent.

## Conclusion

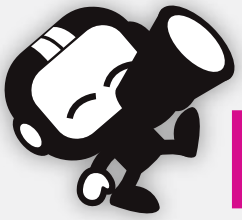
The application of biometric observations to videogames is not new. Similar tests and methodologies have already been successfully employed in the development of triple-A titles such as Valve's *Left for Dead* and EA Sport's *NBA Live 2010*. So far, however, any review of recent publications on biometrics and videogames will reveal that the casual sector has been completely ignored. This is due not only to the financial promise of the higher strata of the industry (which largely focuses on action-oriented shooting, racing and sport games), but to practical reasons as well: Action games give rise to easily detectable physiological patterns. Because academic interest in biometrics continues to grow, and since biometric equipment is fast becoming less expensive and more portable, the future is promising for both biometric and biofeedback applications in casual games. Even at this early stage of development, the specific application of biometric observations as a development tool for the casual sector proved capable of providing deep insights and objective advantages. Our benchmark case-study, *Gua-Le-Ni*, got excellent reviews and has a current Metacritic score of 83%.

One thing I do not believe is that biometrics will become the ultimate game-design tool or the overarching methodology for any issues related to quality assurance. It is another lens, a technological framework capable of offering an added perspective that is particularly fruitful and philosophically interesting. Biometrics does not offer normative answers, but it does grant the possibility to observe players more thoroughly and better understand the games we make. ❊


Powering AAA
From Mobile to Next Gen
unrealengine.com
facebook.com/unrealengine
@unrealengine
EPIC
GAMES
20
YEARS

mochimedia

MONETIZE DISTRIBUTE MAXIMIZE



FOR DEVELOPERS

# MOCHI ADS

## MAXIMIZE YOUR FLASH GAME REVENUE WITH IN-GAME ADS:

- Using one line of code, ads work anywhere your game goes
- 4 different in-game ad products to choose from
- Control where your ads show with domain filtering

Combine Ads with Mochi Media Distribution to reach over 60,000 websites!

# 2.0 GAMES CATALOG

## THE MOST ADVANCED GAME SEARCH TOOL ON THE PLANET WITH:

FOR WEBSITES

- Multiple filter search capability
- Custom game feeds
- Lightning speed

www.mochimedia.com

by Zoran Martinovic;
*Strategic Games Partner Manager, Facebook;*
**Menlo Park, CA**

# Grow Your Mobile Game with Facebook

## Five Features to Find New Gamers and Keep Them Coming Back

Whether building for iOS, Android or the mobile Web, game developers can plug into Facebook in multiple ways to make apps more social and to drive installs. Many of the top-grossing iOS and Android apps are integrated with Facebook, including *Slotomania, DragonVale* and *Draw Something.* These mobile apps benefited from over 1.1 billion gameplay sessions and 160 million unique visitors[1] in April as a result of Facebook.

Find new gamers and keep them coming back with these five features from Facebook.

### 1. Social Discovery

For many developers, getting an app noticed is half the battle. Facebook is designed to distribute apps through social channels and word-of-mouth, so you can reach new people naturally. People are more likely to come back to play a game if it's easy to join the game and play with their friends.

Mobile developers benefit from the same growth channels as web developers on Facebook: People discover apps and games in their news feed, bookmarks and notifications. This generates referral traffic for apps regardless of platform. For example, Facebook recently sent more than 18.5 million visits[2] in the month of March to wooga's *Diamond Dash* iOS app.

Clicking on a story sends people to the native app or to the App Store / Google Play to download it

### 2. App Center

The App Center is Facebook's newest discovery channel and a place to grow high-quality apps. The App Center *https://developers.facebook.com/blog/post/2012/05/09/introducing-the-app-center/* makes it easy for people to find relevant apps on any device, based on what they like and what's most popular among their friends.

From the mobile App Center, people can discover games their friends are playing and browse suggested ones. If a mobile game requires installation, the person will be sent to the App Store or Google Play. People can also discover mobile games on Facebook.com and send a link to the game to their mobile devices. Mobile developers can create an app detail page[3] to be included in the App Center.

App Center drives discovery of high quality, mobile games

### 3. Single Sign-on

Single Sign-on is a key building block for iOS[4] or Android[5] developers integrating with Facebook. This feature makes it easy for people to log in, find friends, and come back to the app quickly. Single Sign-on is the gateway to distributing mobile apps with Facebook's channels.

People prefer the one-click Single Sign-on option over email and other registration methods. As an example, two-thirds of the 1.7 million users of Ludia's *Family Feud & Friends* iPhone app sign in with Facebook.

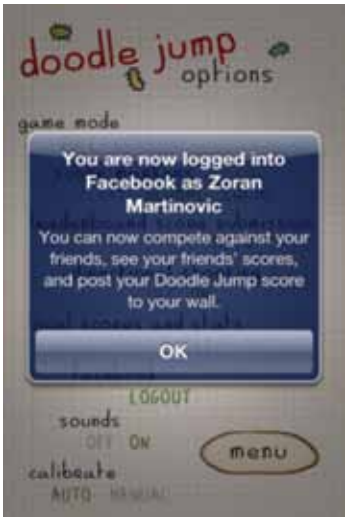
Many mobile developers find that once they bring social features to their app, users who connect with Facebook are more engaged and come back more often than other users. For example:

- Users who log into wooga's *Diamond Dash* with Single Sign-on are eight times more likely to spend money than other users—and they spend 50 percent more on average. Similarly, SSO users spend 80 percent more than other users in BitRhymes' *Bingo Bash* iPad app.
- On average, Facebook users of *Bingo Bash* play 30 percent longer and play 65 percent more sessions than other users.

To get the most out of Single Sign-on, follow these guidelines:

- Display Single Sign-On prominently in the game's user interface. One way to do this is to prompt the user to log in with Facebook during registration like DoubleDown Interactive's *DoubleDown Casino* does. Also, provide the option to play as a guest.
- Inform the user about the benefits of logging in. For example, after a user signs in with Facebook, Lima Sky's *Doodle Jump* tells the user how to play against friends and post scores to Facebook.
- Store the user's session. After your user authenticates for the first time, immediately store the authentication result locally. This way you can keep the user logged in without having to re-authenticate each time.[6]
- Bring friends into the game. Players are more likely to engage with content that's personalized to them and includes their friends' names and faces. From the user's first experience with the game, show the faces of the player's friends who are already playing. Games can do this easily with a leaderboard or neighbor bar.

*DoubleDown Casino* prompts people to login with Facebook at registration


doodle jump
options
game mode
You are now logged into Facebook as Zoran Martinovic
You can now compete against your friends, see your friends' scores, and post your Doodle Jump score to your wall.
OK
LOGOUT
sounds
menu

*Doodle Jump* informs people about login benefits

*Words With Friends* personalizes the game with friends' faces

**Many mobile developers find that once they bring social features to their app, users who connect with Facebook are more engaged than other users and come back more often.**

### 4. Invites and Requests

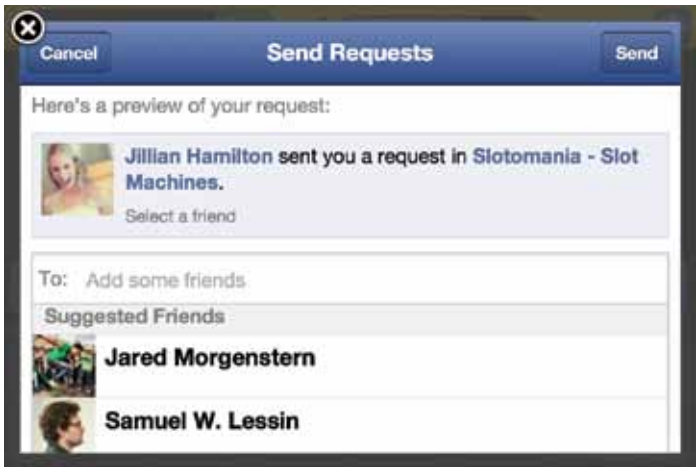
Use requests and invites[7] to reach both new and existing users. Requests, which generate notifications directly on the user's handset, are frequently used to invite new friends to play a game or to share game elements with existing players. Invites are a great way to encourage people to share a new game and help it reach critical mass. Games can even suggest a targeted group of friends[8] to invite based on their mobile device.

Turn-based games can use requests to great effect as a notification mechanism. For example, when players complete their turns in Zynga's *Words With Friends,* they can send a request to their opponents prompting them to play their turn, which encourages friends to keep coming back.

Games can also use requests to send gifts as a retention tactic. Playtika's *Slotomania* and wooga's *Diamond Dash* encourage users to send gifts to their friends, creating a notification on the friend's mobile phone and driving that user back to the game to collect the gift.

Notifications
Sort
Matt Wyndowe sent you a request in Words With Friends.
32 seconds ago
Joey Selim, Drew Hoski and Vishu Gupta comment on a post in Games Loft
26 minutes ago
posted in Competitive Musings.
2 hours ago
Andrew Steven Krieger and Robyn Reiss posted in FYI (Company Announcements).
2 hours ago
Eric Osgood and Namita Gupta posted in Dev Blog Approvers.

Turn-based games use requests to notify people that it's their turn




*Slotomania* uses gifting to keep people coming back

**Invites are a great way to encourage people to share a new game and help it reach critical mass. Games can even suggest a targeted group of friends to invite based on their mobile device.**

### 5. Open Graph

Games can reach an audience beyond their current user base with Open Graph.[9] Open Graph lets users share their favorite games with friends by publishing stories about their game activity to their timeline and news feed. When a user takes an action in a game, such as "playing a word" or "reaching a level," that story is shared with their friends in the news feed. For friends who don't already play the game, clicking on the story takes that person to the App Store or Google Play to download it, depending on where the app originates.

Games can create their own actions and object pairs (such as "beat a boss," which Marvel uses in *Avengers Alliance*) or use common game actions that Facebook provides, like getting a new high score or earning an achievement.

### Closing the Loop with Players on All Platforms

One final word of advice: Many game developers find that they further increase their user base and daily active users by synchronizing gameplay across multiple platforms. For example, the iPad, iPhone and desktop versions of wooga's *Diamond Dash* are integrated with Facebook, which allows users to play with friends regardless of the device they use. A web user can send an invite to a friend who receives that invite on her iPhone and clicks through to play.

The key to all of this is the social sharing and discovery that Facebook makes possible. Taking advantage of these tools gives your users a better experience and helps your apps grow.

Get started integrating Facebook at developers.facebook.com/docs/guides/mobile. ❊

**Many game developers have found that they can further increase their user base and daily active users by synchronizing game-play across multiple platforms.**

1 https://developers.facebook.com/blog/post/2012/05/01/growth-and-mobile-apps/

2 https://developers.facebook.com/blog/post/2012/04/19/developer-spotlight--diamond-dash-mobile/

3 https://developers.facebook.com/docs/appcenter/guidelines/

4 https://developers.facebook.com/docs/mobile/ios/build/

5 https://developers.facebook.com/docs/mobile/android/build/

6 https://developers.facebook.com/blog/post/640/

7 https://developers.facebook.com/docs/mobilerequests/

8 https://developers.facebook.com/blog/post/2012/06/13/platform-updates--operation-developer-love/

9 https://developers.facebook.com/docs/opengraph/

Facebook helps *Diamond Dash* reach a cross-platform audience

appatyze™
EXCHANGE

# ARM your apps

## FREE Installs and cash only from EXCHANGE

Appatyze is a unique suite of products and services that ARM's facebook developers with the tools they need to **Acquire**, **Retain** and **Monetize** their users more effectively.

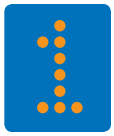
**Get started today**. Visit **appatyze.com** or email us at **contact@appatyze.com**

by Nick Bogovich; *Exec. Director, Mobile, GSN Digital;* **Waltham, MA**

# Making the Most of Your Mobile Games Investment

## Five Tips for Maximizing Mobile ROI

As the mobile landscape gets more crowded, getting ROI from your app is increasingly challenging. Faced with limited development and marketing budgets—and pressure to deliver products on time across multiple platforms and form factors—game publishers need to be smart from product inception through launch and beyond in order to maximize their app's ROI. In this article, I will address a variety of challenges faced in bringing apps to market and provide five tips to help you maximize your ROI. To tie it all together, I'll also discuss how your monetization strategy and development decisions affect the bottom line on your balance sheet.



### TIP #1: FORM AN EFFECTIVE PRODUCT STRATEGY

Before you set out to develop your mobile app, identify the one core value around which your app is built, the one that all decisions you make in building your app will support. For example, before our team started creating *GSN Casino,* we determined that the core value of our app was to provide moments of suspense within a casino, and everything in our app needed to make these suspenseful moments as fun and rewarding as possible. When choosing your core value, make sure to answer the question, "What am I selling to the user?"

Next, learn as much as you can about your potential market opportunity. Identify your target audience, the user experience you want to provide, which competitors are currently meeting your audience's needs, any competitive advantages you can incorporate into your product, and which mobile app business model is right for you. The research you do before starting to build your app not only helps you validate the business opportunity, it also improves the quality of decisions you make during the development and distribution phases.

### TIP #2: CAREFULLY MANAGE BUILD COSTS

Proper planning saves time and money. Before any code is written, spend ample time planning out your user experience and the features that support your app's core value. During this exercise, you should develop a healthy feature pipeline that represents the features that will be available at launch, plus a few updates beyond that.

For launch, focus on the MVP: Minimum Viable Product. Work with the mindset that if a feature in question is not part of the MVP, then it's superfluous to work on at this time. This helps you establish the critical path required to get your app to market. That's not to say that non-MVP features are not worth thinking about while building your launch product. Develop-

Develop different monetization strategies for your whales and guppies.

ing the MVP, while being mindful of how your product might evolve over time, may save you headaches in the future.

### TIP #3: MAP OUT AN ACQUISITION STRATEGY

You can create the best app in the world, but without giving proper attention to your customer acquisition strategy, your app will simply not be successful.

There's a variety of acquisition sources to consider: advertising, cross-promotion, organic growth and viral growth. Organic and viral user acquisition are the cheapest sources (can't beat free!), but they're also the most difficult to measure and predict. Advertising and cross-promotion are more costly, but they're easier to measure, predict and control.

At launch, cast a wide marketing net. Test acquiring users through an assortment of ad networks and cross-promotion channels, and run multiple creative campaigns in the process. Measure cost per acquisition (CPA) on a per-source and per-campaign basis, and begin to optimize which acquisition strategy works best for your app.

CPA is incredibly important for paid apps but only represents part of the picture for freemium apps. Lifetime value (LTV)—the revenue a single user is projected to generate for the product during his or her lifetime—is just as important as CPA for freemium apps and helps you measure the quality of the users you're acquiring. A CPA of $2 per user for your app is fantastic if the LTV of an average user is $4, but it's less than ideal when your LTV is $1.

The sooner you identify the best sources of traffic for your customer acquisition funnel and make adjustments to optimize that funnel, the less money you throw away on unprofitable users.

### TIP #4: MINIMIZE TRANSACTIONAL FRICTION

"You never get a second chance to make a good first impression." This old adage is important to keep in mind when thinking about the onboarding experience. If you can make a good first impression and effectively onboard users, not only are they likely to continue to use your app, they're more likely to monetize as well.

Effective onboarding allows users to easily identify the core experience around which your app is built. If users can't quickly determine what it is they're supposed to be doing in your app, they'll leave. So, hold their hands, show them around and convince them to stay.

And, if they choose to stick around long enough to warrant an in-app purchase, maximize the likelihood of monetization by removing the barriers between the user and the transaction. Each additional step required of a user during a purchase flow results in drop-off, so don't make users do more than what's absolutely necessary to make a purchase. Keep the purchase flow simple.

### TIP #5: DEVELOP A MONETIZATION STRATEGY FOR EACH USER SEGMENT

Not all users are created equal. Different users monetize differently. The most valuable users (otherwise known as whales) have no problem paying significant amounts of money in return for the entertainment experience your app provides. The least valuable users (guppies) will never pay a dime for the service you provide. Even that's OK. Guppies are still monetizable through in-app advertising and offer walls, and they may provide marketing value in terms of virality or user participation.

By developing a monetization strategy for each user segment, you not only increase the likelihood of monetizing your whales and guppies, you also develop a better understanding of each group's user experience in the process. You learn which behaviors guppies exhibit on a daily basis, and what it is that triggers whales to make a big purchase. If you're lucky, you may even learn how to convert a guppy into a whale on occasion. Understanding these user behaviors drives you to make a better product over time, keeping the user experience focused and tight.

While monitoring your users' behavior, it is also helpful to identify the key performance indicators (KPIs) and levels that represent success. How many daily active users (DAUs) do you anticipate? What percentage of these DAUs should be paying to use your app? What should the daily average revenue per paying user (ARPPU) be? Establishing target values ahead of launch allows you to determine the effectiveness of your ad spends and the integration of monetization hooks in your app. Ultimately, this information can help you determine if people are finding enough value in your app to pay for it. If your KPIs are below the levels you anticipated, you probably need to make improvements to your app while you still can.

### The Bottom Line: Understand Your Monetization Equation and Its Drivers

Now that you have the tools to plan and develop your app, you need to be able to effectively calculate monetization. On paper, your app's success is measured by its profitability, or total revenue minus cost of sales and operating expenses. There are a few different ways to estimate total revenue; one way is:

**TOTAL MONTHLY REVENUE = (DAU) x (% Paying Players) x (Daily ARPPU) x (Days in Month)**

Your total revenue will always go up with more DAUs, or a higher percentage of paying players, or a higher ARPPU, so anything you can do to increase those metrics will improve your total revenue.

Cost of sales covers any royalties, hosting fees, or payment processing fees (such as the typical 30 percent app store tax). Operating expenses are comprised of hard build costs, staff, contractors, QA, and any marketing or advertising costs. Driving any of these numbers down improves your profitability.

Be careful, though, in how you manage your operating expenses. It's one thing to keep expenditures low because you hired the right team, effectively managed your product throughout its lifecycle, and made good business decisions along the way. It's another thing entirely to cut costs for the sake of minimizing operating expenses in an effort to maximize profitability. Artificially-lowered operating expenses lead to an inferior product, less-than-satisfied users, and lower revenues. In other words, cut costs too aggressively and you might actually be sacrificing your product viability.

This is why understanding your app's monetization equation and what drives it is so important. Maximizing your app's ROI involves more than the numbers that drop to your bottom line. It requires game publishers to iterate through a series of well-informed business decisions from product inception through launch and beyond. ❊

NEWS
Autodesk®
Scaleform®
unity
Now compatible with Unity
and optimized for mobiles at a new price.
Unity UI plugin
Scaleform for Unity provides an out-of-the-box integration allowing Unity developers to create triple-A quality game UI and menu screens using Flash®. This integration is designed to work as a native plug-in to the Unity engine and requires no C++ programming.
UI solution for mobile game engines
The Scaleform SDK can be easily integrated into a wide variety of thrid-party and proprietary mobile engines to create triple-A quality menus in a fraction of the time. This solution has already been adopted by many larger customers with proprietary engines and is now available to the general public at an affordable price.
Standalone mobile platform
The cross-platform, highly optimized Flash playback capabilities of Scaleform make it an ideal solution for developing games and applications on iOS and Android. Additional features include the rapid deployment of Flash content, ActionScript™ 3 and C++ programming for game logic, and a small memory footprint.
MOBILE SYSTEMS
iOS
OTHER INTEGRATIONS
VISION
bigWORLD
CRYTEK
4:32PM

Evaluate today at gameware.autodesk.com

Autodesk®

© Copyright 2012 Autodesk, Inc. All rights reserved.
Autodesk and Autodesk Scaleform are trademarks of Autodesk, Inc. in the U.S. and/or other countries. Other names and brands are the property of their respective owners.

# How Game Publishers Dramatically Grow Income through Direct Deals

At last year's Casual Connect Seattle, venture capitalist Tim Chang said, "If content is king, then distribution power is God Almighty." No matter how amazing your app is or how great your retention rates are, it won't matter if users don't get to know your app. It should be news to no one that on-device promotions are more efficient than any other kind of promotion for mobile games—but the industry is moving beyond traditional ad networks and into alternative distribution channels.

## Distribution Power

Being successful in the App Store—and being discovered among over 500,000 apps—is about leveraging your distribution power. There are many different ways to harness the power of the user network and increase distribution. We believe they can be broken down into three categories:

» ***Internal Cross-promotions*** Promote new titles to users of your existing games. Chartboost, Playhaven, and AdWhirl offer solutions to serve internal cross-promotion, although many developers still use custom-built platforms.

» ***Ad Network Advertising*** Buy or sell traffic through an ad network, where ads are served randomly within targeting constraints. Dozens of ad networks provide CPC or CPI advertising for games, Admob, Flurry, Tapjoy, and Chartboost among them.

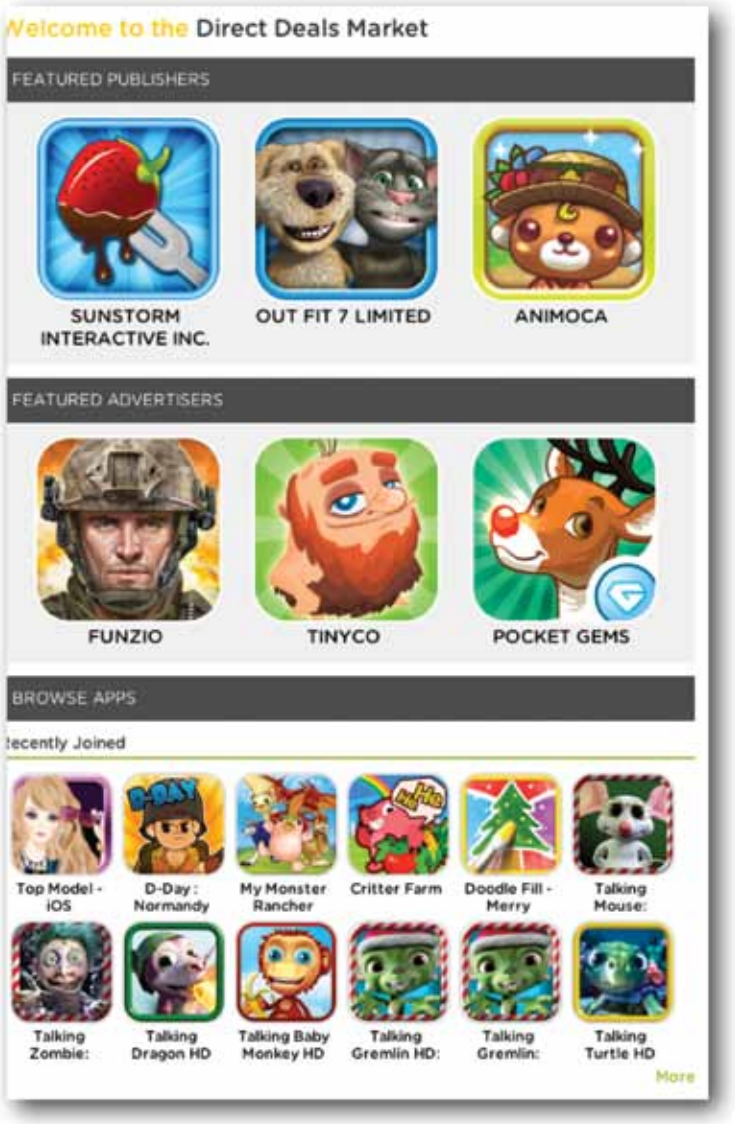
» ***Direct Deals*** This is a new trend that is expanding among game developers. It consists of buying and selling inventory directly, gaming company to gaming company, without going through an ad network that keeps 50 percent of the revenue. Until very recently, very few companies were doing that, and they generally used internal technologies or bit.ly links to track performance. Some of the leaders in this space are ngmoco:), TinyCo, Pocket Gems, and Tapulous.

In general, game developers with strong distribution utilize all three promotional options in some capacity or another.

## Why Direct Deals?

Most game developers have tried some variety of the first two categories of promotional options, and both have their obvious shortcomings. Internal cross-promotion requires a large existing user base. Ad networks are expensive and often non-transparent, which can make it hard to achieve a good return on investment.

by Claire Teter & Pepe Agell;
*Chartboost;*
**San Francisco, CA**




**It should be news to no one that on-device promotions are more efficient than any other kind of promotion for mobile games—but the industry is moving beyond traditional ad networks and into alternative distribution channels.**

When game developers buy and sell traffic directly from one another, they bypass the ad network fees, so advertisers can pay less and publishers can make more. Advertisers can negotiate to have top priority for a publisher's traffic and ensure that the demographic match in the publisher's games is high. To put it simply, direct deals are a way to maximize your money *and* your control.

Many major game developers are already on board with direct deals, and the numbers speak for themselves. Network click-through rates average 12 percent, but direct deals click-through rates can reach a staggering 30 percent. Network eCPMs average five dollars, while some direct deals partners have achieved over $20 eCPMs. The net benefit is that direct deals allow game advertisers to target more effectively thanks to added transparency. In addition, publishers make more money and users appreciate the more relevant content. In the end, it's a win-win-win for advertisers, publishers and users.

### The Power of Interstitials

With any of the three types of strategies, the game developer publishing ads has to be careful about balancing monetization and user experience. Full-screen interstitials are, in our experience, the best ad units to strike that balance. This is why:

1. **Great User Experience:** Full-screen interstitials run before or between spurts of gameplay, and they don't take up valuable screen space during the game. With a careful eye for

Interstitial on the Chartboost platform

design and choice of ad partners, interstitials can be crafted to act as contextual recommendations to users rather than disruptive advertisements.

2. **Great Performance:** Interstitials offer amazing performance for the volume of ads. As a publisher, you're maximizing your eCPM and leveraging your traffic to its fullest extent.

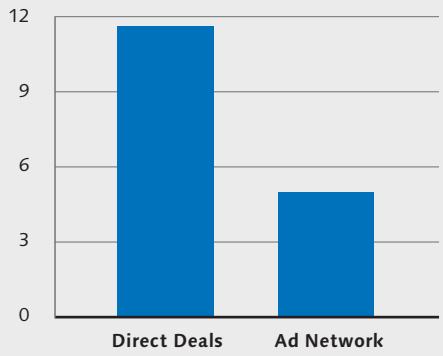
### Direct Deal Tools

Of course, handling direct deals requires some technical and business overhead—from making the deals to serving and tracking the ads. If you don't want to try to handle all of that yourself, you can turn to a company that makes it easy to administer and serve direct deal campaigns. Chartboost provides a social network-like marketplace for direct deals to make it easy to contact and negotiate with potential direct deal partners. Mopub recently launched a private marketplace that enables advertisers to buy inventory directly from specific publishers at a preset price.

With the right tools, the negotiation, execution, and analysis of direct deals can be as straightforward as running a network campaign. ❊

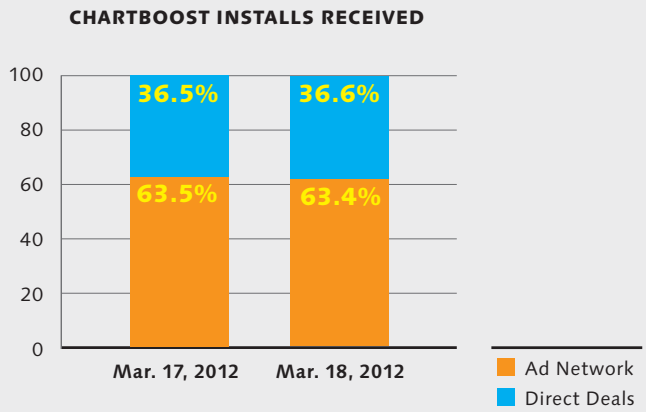
## DIRECT DEAL PUBLISHING: KILOO

Kiloo, the developer behind *Frisbee Forever* and *Bullet Time,* has discovered the benefits of splitting its volume between direct deals and a network of game advertisers. From January 1 to March 31, 2012, Kiloo saw an average eCPM of $4.77 for full-screen interstitials served through the Chartboost network. Its direct deals, however, paid 143 percent more: an average eCPM of $11.58.




## DIRECT DEAL ADVERTISING: GREE INTERNATIONAL

When GREE launched *Zombie Jombie* in the U.S., it ran a series of burst campaigns in hopes of gaining a significant number of downloads through the App Store. GREE used a combination of network campaigns on several platforms, along with direct deals through Chartboost. By securing priority placement through direct deals with several partners, GREE was able to more than double the number of installs it received on the Chartboost platform during the launch weekend of March 17. Despite paying the same CPI on the Chartboost network and in its direct deals, GREE received 1.7 times as many installs through direct deals as it did through its Chartboost ad network campaign.



# DOUBLEDOWN INTERACTIVE

FOUNDED IN 2009, DOUBLEDOWN INTERACTIVE IS ONE OF THE FASTEST GROWING SEATTLE BASED SOCIAL GAMES COMPANY WITH OVER 100+ EMPLOYEES THAT DEVELOPS NON-GAMBLING, CASINO STYLE GAMES. OUR FLAGSHIP PRODUCT IS THE ULTRA-FAST GROWING DOUBLEDOWN CASINO ON FACEBOOK WITH OVER 5 MILLION MONTHLY ACTIVE USERS.

AS ONE OF THE TOP GAME DEVELOPERS ON FACEBOOK WE ARE COMMITTED TO BUILDING A COMPANY THAT RECOGNIZES AND REWARDS ALL EMPLOYEES.

COME AND CHECK US OUT!

WWW.DOUBLEDOWNINTERACTIVE.COM

# The Android Opportunity

## Development, Porting and Device Considerations

Sometimes it's difficult to spot a trend until it is in the rearview mirror, but we are currently experiencing such a marked and noticeable change in gaming that it's impossible to miss. Mobile devices, especially smartphones and tablets, are experiencing an unprecedented market expansion. A comparison of the relative growth of these mobile touch devices to that which personal computers have experienced for over 30 years is pretty impressive. Projections have mobile devices dwarfing sales of PCs in a matter of a few years. And when you take into account that PC sales have generally increased year over year since their market debut, that prediction becomes stunning.

In the tablet market, Android devices are second to Apple's iPad, but analysts believe Android will continue to grow its share of the market. According to IDC, Android tablets will overtake Apple's worldwide market share by 2015.

### The Android Influence

First of all, the Android OS continues to dominate the smartphone market. Both Gartner and comScore report that Android has over 50 percent share of the smartphones market worldwide and in the U.S. In the tablet market, Android devices are second to Apple's iPad, but analysts believe Android will continue to grow its share of the market. According to IDC, Android tablets will overtake Apple's worldwide market share by 2015. And while it might be true that iOS has generated more revenue than Android, we see this disparity of relative revenues as a huge opportunity.

According to Google, over 850,000 new Android devices are activated each day. In many respects, the Android platform might be compared to the traditional Microsoft Windows PCs. Just as there are many companies making devices to support Microsoft's operating system for PCs, there are significant numbers of partners making devices utilizing Google's Android and supporting the operating system. What's more, the Android platform is much more open than iOS—open both in the number of companies supporting it and in the innovation that is currently being brought to it. While this open platform can have drawbacks, especially early on, in the long run it sets up Android for success.

When asked why WildTangent chose to add an Android version of our game service to our portfolio, all we have to do is share the impressive growth statistics. And while iOS devices have received huge support from developers and the press alike, Android smartphones are outselling them by a substantial margin.

### Formula for Success

It's only a matter of time before all the necessary elements align and Android starts to produce significant returns. In order to monetize a mobile game effectively, five elements must come together:

- Great Content
- Business Models
- Execution
- Billing Ease
- Exposure

When the Android platform first launched, it could easily be argued that three or even four of

by David Worle & Brooks Pentheny; *WildTangent;* **Redmond, WA**

these elements were missing. Unlike iOS, which has been strictly controlled and in many ways planned, Android offers a more open (and sometimes messier) platform—which is very good for innovation, but not so great for initial execution.

Things are improving constantly, however, as companies learn to exploit the beneficial aspects of the more open platform. We can look at the lifecycle of PCs and even consoles for clues of what might be in store for Android. Initially, *purchase* was the only model available for these devices, but rental, item purchase, and advertising all arose quickly to create huge new opportunities. With the recent introductions of API's from the various distribution portals on Android, look for rental, advertising, and in-game purchase all to make significant contributions to the overall revenue pie this coming year. New companies will find ways to get games in front of consumers with innovative business models, cleaner user experiences, easier payment options, and better selection will all begin to emerge.

## Android Development Concerns

Because there are so many Android devices and platform versions, Android can be a confusing platform. There are dozens of manufacturers releasing new hardware every month. You have Google releasing new, or updated, versions of Android every couple of quarters. You also have to take into account

**Worldwide Sales of Media Tablets to End Users by OS**
(Thousands of Units)

| OS | 2011 | 2012 | 2013 | 2016 |
|---|---|---|---|---|
| iOS | 39,998 | 72,988 | 99,553 | 169,652 |
| Android | 17,292 | 37,878 | 61,684 | 137,657 |
| Microsoft | 0 | 4,863 | 14,547 | 43,648 |
| QNX | 807 | 2,643 | 6,036 | 17,836 |
| Other Operating Systems | 1,919 | 510 | 637 | 464 |
| Total Market | 60,017 | 118,883 | 182,457 | 369,258 |

Source: Gartner (April 2012)

**Worldwide Smartphone Sales to End Users by Operating System in 4Q11**
(Thousands of Units)

| Operating System | 4Q11 (Units) | 4Q11 Market Share (%) | 4Q10 (Units) | 4Q10 Market Share (%) |
|---|---|---|---|---|
| Android | 75,906.10 | 50.9 | 30,801.20 | 30.5 |
| iOS | 35,456.00 | 23.8 | 16,011.10 | 15.8 |
| Symbian | 17,458.40 | 11.7 | 32,642.10 | 32.3 |
| Research In Motion | 13,184.50 | 8.8 | 14,762.00 | 14.6 |
| Bada | 3,111.30 | 2.1 | 2,026.80 | 2 |
| Microsoft | 2,759.00 | 1.9 | 3,419.30 | 3.4 |
| Others | 1,166.50 | 0.8 | 1,487.90 | 1.5 |
| Total | 149,041.80 | 100 | 101,150.30 | 100 |

Source: Gartner (February 2012)

**Total U.S. Mobile Subscribers (Smartphone & Non-Smartphone) Ages 13+**

| | Share (%) of Mobile Subscribers | | |
|---|---|---|---|
| | 11-Nov | 12-Feb | Point Change |
| Total Mobile Subscribers | 100.00% | 100.00% | N/A |
| Sent text message to another phone | 72.60% | 74.80% | 2.2 |
| Used downloaded apps | 44.90% | 49.50% | 4.6 |
| Used browser | 44.40% | 49.20% | 4.8 |
| Accessed social networking site or blog | 33.00% | 36.10% | 3.1 |
| Played Games | 29.70% | 32.30% | 2.6 |
| Listened to music on mobile phone | 21.70% | 24.80% | 3.1 |

Source: comScore MobiLens

**With the recent introductions of API's from the various distribution portals on Android, look for rental, advertising, and in-game purchase all to make significant contributions to the overall revenue pie this coming year.**

how Android has fragmented itself with each version: Froyo, Gingerbread, Honeycomb, and Ice Cream Sandwich. Next up: the rumored Jellybean OS.

Because of that fragmentation, you can't really say that there are "best" devices to test on. What many servicers, developers, and publishers do is test their games/applications against a range of devices:

**PHONES:**

» ***High-end Smartphone*** $299+ with contract, HD display, quad/dual-core CPU, 8GB-16GB+ memory, HDMI Out. Android 2.3 and 4.0. Typically early adopters lean toward these devices.

» ***Mid-range Smartphone*** Sub-$199 with contract, high-end single core CPU, 2GB-8GB memory, branded devices. Android 2.3.

» ***Mid to Low-end Smartphone*** Sub-$99 with contract, single core CPU. Android 2.2 and 2.3. Typically value customers.

» ***Low-end Smartphone*** Sub-$49.99, limited CPU, low resolution display. Android 2.2 and 2.3. Typically prepaid, family sub-accounts, or hybrid plans.

**TABLETS:**

» ***High-end Tablet*** Sub-$650, example Asus Eee Pad Transformer Prime or Toshiba Excite. Android 4.0.

» ***Mid-range Tablet*** Sub-$250, example Amazon Kindle Fire. Android 3.2.

» ***Low-end Tablet*** Sub $89, example Coby Kyros. Android 2.2 or 2.3.

On top of those devices, you also need to be aware of each carrier's featured devices and high-performing devices. The current top test devices include:

- ***Samsung Galaxy Nexus***
- ***Amazon Kindle Fire***
- ***Asus Eee Pad Transformer***
- ***LG Optimus S***
- ***Motorola Droid Series***

games passport

1 We Drive Traffic

2 We Manage Retention

3 We Monetize for You

# PLUG YOUR GAME TO OUR API START MAKING MONEY NOW !

## DEVELOPER CENTER

**Download Our API**

Connect our API to your games

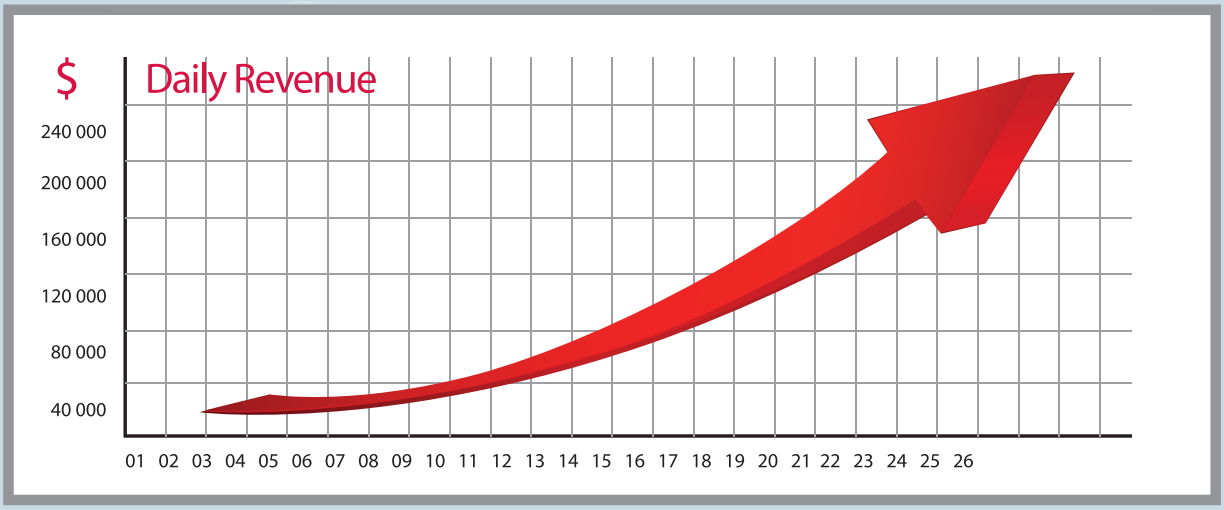
**Plug Your Game**

Connect your games to the platform

**Test and Debug**

Test and Debug your games

## ACCESS YOUR DASHBOARD




Come and meet us at
table **number 5** in the **Gold Section**

Many developers find themselves in the following position: They build a game for Android 2.3 phones. In a year, is it worth their time to upgrade the game? How much work would that take? In order to take advantage of the latest and greatest hardware and features, do they build a completely new game?

**Top Smartphone Platforms 3 Month Avg. Ending Feb. 2012 vs. 3 Month Avg. Ending Nov. 2011**
**Total U.S. Smartphone Subscribers Ages 13+**

| | Share (%) of Smartphone Subscribers | | |
|---|---|---|---|
| | 11-Nov | 12-Feb | Point Change |
| Total Smartphone Subscribers | 100.00% | 100.00% | N/A |
| Google | 46.90% | 50.10% | 3.2 |
| Apple | 28.70% | 30.20% | 1.5 |
| RIM | 16.60% | 13.40% | -3.2 |
| Microsoft | 5.20% | 3.90% | -1.3 |
| Symbian | 1.50% | 1.50% | 0 |

Source: comScore MobiLens

## Hardware Compatibility

Deciding what devices and versions of Android you want to support is key. As a servicer, we focus heavily on compatibility. Here are our recommendations for a compatibility check:

- Is the game designed for smartphones, tablets, or both?
- Does the game have good compatibility across all, or most, test devices?
- Is the game designed for Android 2.2, 2.3, 3.0, 4.0?
- Does the game play as intended across all approved versions of Android?
- Do games built for Android 2.2, 2.3, or 3.0 play as intended on Android 4.0?
- Does the game play as well as intended on all hardware types?
- What are the differences between featured, high-end, mid-range, and low-end devices?

Many developers find themselves in the following position: They build a game for Android 2.3 phones. In a year, is it worth their time to upgrade the game? How much work would that take? In order to take advantage of the latest and greatest hardware and features, do they build a completely new game?

In addition, here are some of the more common questions we ask when testing and porting Android games:

» ***Amazon Kindle Fire*** Is the Kindle Fire a supported device?

» ***Control Check*** Does the game support tilt control, and does the control function as intended on all devices? Is the hardware built with an accelerometer, gyroscope, or both?

» ***3G/4/LTE Multiplayer*** Is the experience worth playing? Is a specific device required to play, or do all devices include the same multiplayer experience?

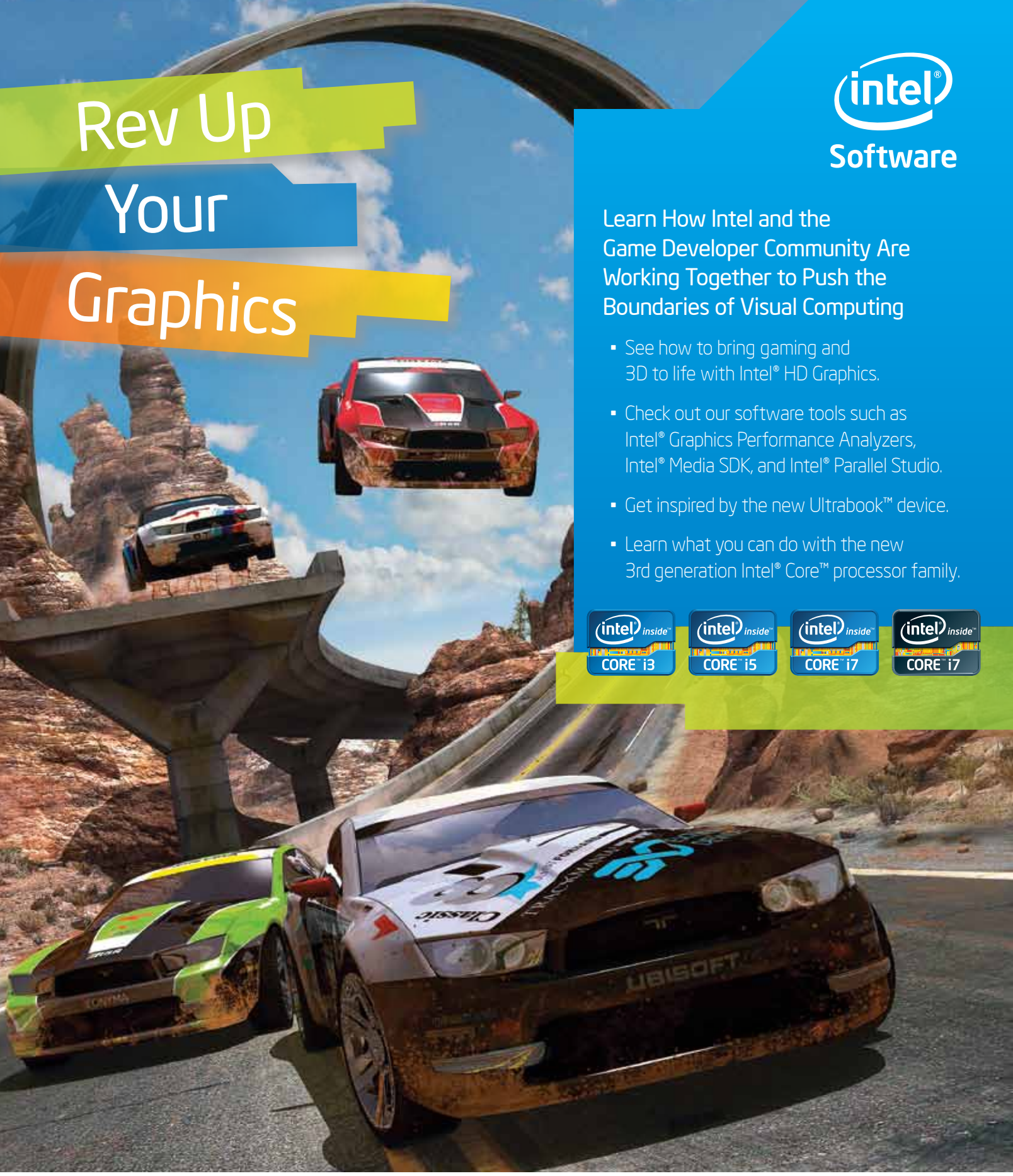
» ***Sleep Mode*** Does the game function as intended when the Android device power/pause button is manipulated? Does the game continue to play in the background while the hardware appears to be paused?

» ***Graphic Scaling*** Are art assets/graphics aligned properly on all devices? Does rotating the device with the screen lock on/off adversely affect the graphics? How does the game handle HD resolutions?

» ***Zoom Compatibility Icon*** Does this button function as intended on different tablets? Does it adversely affect functionality of the game?

## What Happens Next

There will be developers and content aggregators who understand and then decide how to overcome and take advantage of the challenges of publishing on an open platform. These companies will be competing for a share of the largest audience and the largest pools of money to ever emerge in the gaming space. ❊




intel® Software

## Learn How Intel and the Game Developer Community Are Working Together to Push the Boundaries of Visual Computing

- See how to bring gaming and 3D to life with Intel® HD Graphics.
- Check out our software tools such as Intel® Graphics Performance Analyzers, Intel® Media SDK, and Intel® Parallel Studio.
- Get inspired by the new Ultrabook™ device.
- Learn what you can do with the new 3rd generation Intel® Core™ processor family.

intel inside CORE i3 | intel inside CORE i5 | intel inside CORE i7 | intel inside CORE i7

TRACKMANIA² CANYON

NADEO UBISOFT

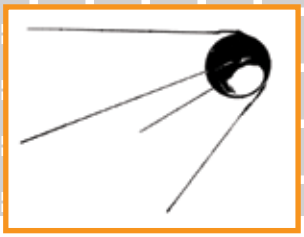
© 2012 Intel Corporation. All rights reserved. Intel, the Intel logo, Intel Core, and Ultrabook are trademarks of Intel Corporation in the U.S. and other countries.
© 2011 Ubisoft Entertainment. All Rights Reserved. Ubisoft and the Ubisoft logo are trademarks of Ubisoft Entertainment in the US and/or other countries.
Nadeo and Trackmania logos are trademarks of Nadeo in the US and/or other countries. Nadeo is a Ubisoft Entertainment company.

# The Space of Gaming

## Views of a Tetri-naut

TETRIS ON GAME BOY
1984

1957
SPUTNIK 1 LAUNCHES



As a child I had two passions: space and video games. Growing up in New Mexico, there wasn't much to do but tell Roswell stories and play your Commodore 64 with the fan blasting. So, (no surprise) like every other child of the '80s, I had a fascination with *Tetris*. What is surprising, however, is that there are so many acute parallels between the development of *Tetris* and the growth of its narrative parallel: the space program. Though dissimilar in purpose, in many ways they are companion rockets shot on similar trajectories.

### Liftoff

Sputnik 1, the first artificial satellite to be deployed outside Earth's troposphere, was launched into an elliptical low Earth orbit by the Soviet Union on October 4th,1957. Although it predated *Tetris* by several decades, its launch was perfectly allegorical in fate. Humans had gone mobile in a big way.

Although *Tetris* was originally conceived in a Soviet computer lab by Alexey Pajitnov in 1984, the game didn't really gain momentum in the West until 1989, when it was included as a pack-in title with my childhood friend: the Game Boy. The sales volume made *Tetris* the first mobile game to reach critical mass.

Limited in resolution and movement—the accelerometer still in the world of aerospace engineering—the Game Boy managed to do something marvelous. You could play with your friends, or at least adjacent to them, at school. The mobility meant no supervision, no cords, nothing grounding your obsession to a location. You were a free agent. The Game Boy retailed for around $89.95 in the U.S., and, poor as I was, I sold a lot of empty aluminum cans to get one.

### Acceleration

Apollo–Soyuz Test Project (ASTP) launched in July, 1975. Unlike previous manned spaceflights, this shuttle was the first joint U.S.–Soviet space flight—a manned rocket with a "multi-player mode." A symbol of the policy of *détente*, ASTP marked the end of the space race that began nearly 20 years prior.

Although Sega had released the Arcade version in 1998, *Tetris* made a similar leap forward when *Tetris Worlds* was released on Xbox Live in 2003. The game was bundled with the system itself as a gift to the lucky buyer. It allowed users to play six variants of *Tetris* in either single or multiplayer mode.

### Proliferation

In the mid-'90s, five space agencies—the American NASA, the Russian RKA, the Japanese JAXA, the European ESA, and the Canadian CSA—jointly established the International Space Station program (ISS). Even though it is divided into two sections—the Russian orbital segment and the United States orbital segment—the space station is shared by multiple nations. The first piece of the station launched in 1998, and since, it has evolved piece by piece. However, not all news from the base has

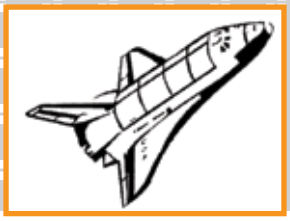
by Alex Tarrand;
*Sr. Product Planner, Microsoft;*
**Los Angeles, CA**

TETRIS ON XBOX
2003

TETRIS ONLINE LAUNCHES
2009

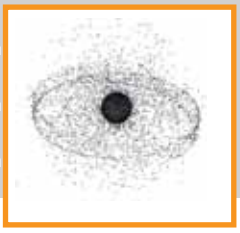
TETRIS ON ANDROID
2011

1975
ASTP LAUNCHES



1998
SPACE STATION BEGINS CONSTRUCTION

2001
1ST LEISURE SPACE FLIGHT & SPACE DEBRIS



been positive. The station's data show that it is occupying crowded space, with an estimated 500,000 particles (ranging in size from 1cm to the width of a sedan) flying around its greater circumference.

In 2009, *Tetris* went completely international when Tetris Online launched the first official web-based *Tetris* game site. Tetris Online added completely new social elements to the *Tetris* experience, making it possible to earn badges, make purchases in the Tetris friends shop, execute missions, and log in via Facebook. According to Eui-Joon, executive producer at Tetris Online, the platform brought a number of other advantages to developers as well. "The fact that you can charge per month as a service gives huge advantages over buying a game as a package. It was the birth of games as a service rather than just a finished product. Online games turned out to be five to 10 times as lucrative because successful games can last for five to 10 years rather than being hot for just three to six months."

Nevertheless, like the ISS before it, Tetris Online was launched into a teeming and crowded space. In 2004, Facebook made our lives both more and less social at the same time. Then in 2007, Apple introduced the iPhone, and in July, 2008, the app market launched and oceans of developer accessibility parted. Meanwhile, the Internet made entertainment a crowd-sourced experience. We saw more and more indie developers, blog communities, and markets (Android/Windows)—the basis of a full-blown casual games renaissance. Of course, with so many new games launching into the firmament, survival would depend more than ever on acquisition and retention. Eui-Joon describes the situation this way: "*Tetris* is a very strong brand. But as the landscape shifts more to free-to-play, it's not only important for people to download and try the game, but to continuously play thereafter. If the users do not play, they will not pay, and the product will not monetize well. The brand will bring in users, but it will be the high quality experience of the product that will keep them playing and monetize the game."

## Commercialization

On April 30, 2001, Dennis Tito, an American businessman, hitched a ride aboard a Russian Soyuz rocket for a trip to the International Space Station. The cost: $20 million dollars for a one-week stay. In February, 2007, officials from Richard Branson's Virgin Galactic and NASA signed a memorandum of understanding and collaboration to work together in their space endeavors. Now in 2012, Virgin Galactic is taking reservations—along with a $20,000 deposit—for sub-orbital space flights costing around $200,000 apiece.

The commercialization of *Tetris* entered a whole new dimension in August 2011, when the game was offered for free on the mobile Android marketplace. Soon thereafter, the game launched a micro-transaction economy based on T-coins, taking accessibility and monetization to a new frontier.

What's next in our cubed protagonist continuum? As with space exploration, only human ingenuity and time will tell. ❊

ADCOLONY

# MAXIMIZE MONETIZATION OF YOUR APPS

## CONNECT WITH US AT casual connect seattle

VISIT US AT **BOOTH 14G**

ADCOLONY'S **INSTANT-PLAY™ HD MOBILE VIDEO ADS** DELIVER

PREMIUM **MONETIZATION**

**LOYAL** & **ENGAGED** USERS

SEE WHO'S WORKING WITH US!

20th Century Fox · Scion · FUNZIO · TinyCo™ · glu

**FOLLOW US ON TWITTER**
@adcolony

**START MONETIZING TODAY!**
adcolony.com/developers

**CONTACT US**
publishers@adcolony.com

**SDKs AVAILABLE FOR**
iOS

by Michael Bergen;
*Sr. Partner Alliance Manager, MHL Consortium;*
**Sunnyvale, CA**

# Own the Living Room

## Expand Your Mobile World with MHL Technology

**MHL is a mobile connectivity standard for a wired connection between a smartphone or tablet and a digital display such as a TV or a digital monitor.**

MHL stands for Mobile High-Definition Link. It was created by a consortium founded by Nokia, Samsung, Silicon Image, Sony, and Toshiba. MHL is a mobile connectivity standard for a wired connection between a smartphone or tablet and a digital display such as a TV or a digital monitor—with Android devices being the first implementations. MHL technology sends full 1080p high-definition video to the display, as well as up to eight channel (7.1) audio, all while charging the phone. Over 50 million MHL-enabled products shipped in 2011.

It's important to understand that MHL technology is not a product; it's a technical specification that has been adopted by well over 100 companies, including major mobile device manufacturers such as Samsug, HTC, LG, Huawei and others, across a wide range of consumer electronics products. In fact, many of the newest and most popular Android smartphones have MHL technology built into them, including the Samsung Galaxy S III, Samsung Galaxy Nexus, Samsung Galaxy Note, HTC One X, LG Optimus LTE, the Huawei Ascend D quad, and many more. You can't tell if a phone is MHL-enabled just by looking at it, as MHL technology uses the existing connections on the phone. The most up-to-date list of commercially available and publicly announced MHL-enabled products can be found at: http://meet-mhl.com/productlist/

### Better with MHL

There are a number of ways to show your smartphone's screen on a digital display today, but none of them have the feature-set or the simplicity of the connection that MHL technology delivers. One strength of a wired connection is that it requires no configuration or discovery—just plug it in and it works. Another advantage of a wired connection is that it allows the MHL port on the TV (or in the case of legacy HDMI TVs, an MHL adapter) to charge the phone while it's connected. In addition, MHL technology uses only five wires, so the cable is much thinner, lighter, and more flexible than an HDMI cable. Furthermore, because it's a wired connection, there's no latency, which is of course important for a great gaming experience. Finally, the MHL specification features Remote Control Protocol (RCP), which allows the TV's remote to be used for navigation and playback control, regardless of manufacturer.

MHL technology consists of both hardware and software (firmware), so it's not something that can be added later via a firmware upgrade. There are already tens of millions of MHL-enabled Android smartphones and tablets in the market, with the number of MHL-enabled TVs and monitors growing. When connecting an MHL-enabled smartphone to an MHL-enabled TV or monitor, simply use a thin, light, passive MHL cable. If you don't have a newer display with an MHL port, don't fret—you can still use MHL technology with a legacy monitor or TV with an HDMI port by using a readily-available MHL-to-HDMI adapter. Plug the adapter into your MHL-enabled phone on one end. The other end goes to an HDMI cable connected to your TV, and to power the phone the adapter is plugged into a wall outlet.

### The Smartphone as Controller or Console

Studies show that people play their mobile games at home more than anywhere else, and playing games

**Studies show that people play their mobile games at home more than anywhere else, and playing games is better with MHL technology. Imagine how great the gaming experience would be on a big screen TV!**

is better with MHL technology. Imagine how great the gaming experience would be on a big screen TV! There are a number of different game modes that are best suited to this vision, including using the phone as a game controller or as a gaming console.

To use the phone as a game controller, users must be able to play the game without looking at the phone screen—accelerometer games and games that use quad touch are two good examples. With quad touch, the developer divides the phone's screen into virtual quarters, so that tapping the phone anywhere in the upper left quadrant, upper right quadrant, lower left quadrant, or lower right quadrant has a different effect (for example, turn left, turn right, fire main weapon, activate shields). In addition, a developer can add up to four additional triggers by using two-finger taps, although this may create additional complexity to the game-play experience. Coupled with the use of the accelerometer, quad touch turns any Android smartphone into a game controller that the gamer can hold while playing the game in full HD glory on their big screen TV.

Using the phone as a game console requires an external controller, such as a Bluetooth joystick or mouse. There are already several great games that use external game controllers such as the Zeemote JS1. In this game mode, the phone could be sitting on the mantel, connected to the TV with an MHL cable or adapter. You would then use the external controller to start and play the game through your smartphone, just like a traditional game console. Using the smartphone in this fashion has some great advantages over a dedicated console. For example, there are far more smartphones in use than consoles. What's more, game development on smartphones tends to be faster and easier than on consoles. In addition, unlike a console, you can take a smartphone (and the game) with you, creating a sticky experience through continuous on-the-go play.

### Writing Games for TV-Out

When creating or updating a smartphone game for play on a big-screen TV or monitor, you should keep in mind that the game and all menus should run in landscape mode to take advantage of the natural aspect ratio of a TV. You may also want to put a menu option or button for "TV-out," which would activate a much higher resolution version of the game on the phone screen. This may make the game difficult or impossible to play on the small screen of the phone, but ideal on a big screen TV. Also, don't forget to think about the sounds and music in your game. Many TVs are connected to home theater systems, and even those that aren't are still likely to have far better speakers than those on a mobile phone. As you develop your soundscape, use headphones, an amplifier, or high quality speakers to ensure an immersive sound experience.

MHL technology is a fast-growing mobile connectivity standard for high-definition video-out on smartphones, in part due to a thriving and diverse ecosystem. There are currently well over 100 adopters of the standard, encompassing a wide variety of products and industries. These include smartphone and tablet manufacturers, TV and digital monitor makers, cable manufacturers, silicon providers, home entertainment system companies, and even automotive companies. It's a vibrant community, all working to make MHL technology ubiquitous, which creates tremendous opportunities for game developers. There has been a lot of discussion in the industry recently about multi-screen and multi-platform support, and the challenges and opportunities therein. There's probably no easier way to leverage games across multiple screens than with MHL technology.

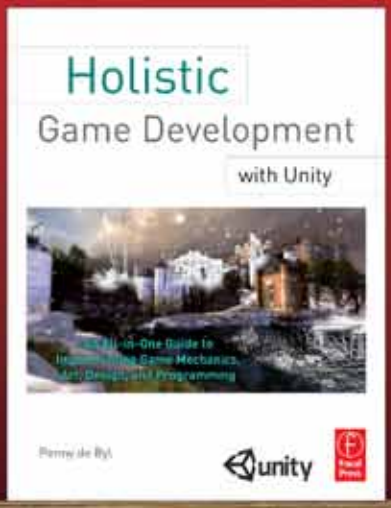
### Conclusion

MHL technology is a standard that many people have never heard of, even though it's likely that the Android smartphone in their pocket already has it built-in. It's an ideal way to play mobile games on a big screen TV or monitor, because not only does it send full HD video and immersive sound to the display, it also charges the phone at the same time. It's easy to create games that are better with MHL if you give some thought to the game mechanics, the sound, and the high resolution graphic assets. In fact, a number of your current games may already be well-suited for the big screen. The increased usage of MHL-enabled phones and displays, coupled with the complete feature set of MHL technology, make this the perfect time to own the living room with mobile games. ❊

# Focal Press books is honored to sponsor the IGDA Summit and Casual Connect

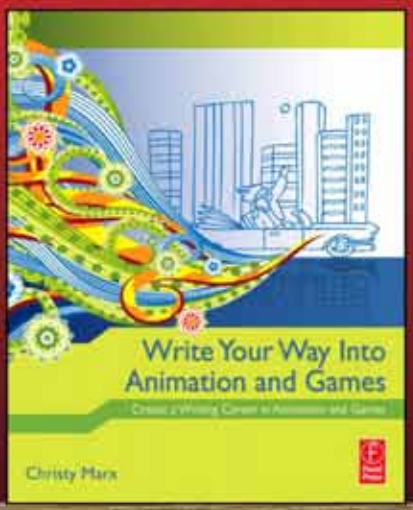
By Luke Ahearn
$59.95

Learn everything you need to create stunning, professional textures. Give your digital art depth and breadth.




By Penny de Byl
$44.95

An authoritative guide to creating games in Unity. Taking you through game design, programming, and art.




By Christy Marx
$39.95

Launch your career in writing for video games or animation. Let our award-winning writers and game developers show you how to generate ideas and create compelling storylines, concepts, and narratives.

Are you a game pro looking to make a few bucks while sharing your knowledge?
Learn more about freelance opportunities writing for our new Game focused Mastering-site.

Also visit focalpress.com/creativity.aspx, for a chance to win a Kindle Fire and a shelf's worth of books!

Focal Press

Creativity has an endless shelf life.

focalpress.com

# Create Games with Unity

Unity is a feature rich, fully integrated development engine for the creation of interactive 3D content. It provides complete, out-of-the-box functionality to assemble high-quality, high-performing content and publish to multiple platforms. Unity helps indie developers and designers, small and major studios, multinational corporations, students and hobbyists to drastically reduce the time, effort and cost of making games.

unity

unity3d.com

by Jon Atkinson; *Sr. Program Manager, VMC;*
**Montreal, Canada**

# Certification Is Dead! Long Live Testing!

## A New Approach to Mobile Quality Assurance

Four years ago, if you asked any mobile developer for an opinion on mobile certification you would have invariably received similar responses—most of which couldn't be published. Developers considered certification programs costly and time-consuming barriers that caused delays to revenues. Feature phone content (whether J2ME, BREW, or Symbian) was typically delivered to customers directly via their wireless providers' decks.

As the carrier was responsible for collecting payments on behalf of all developers, the content was viewed as the carrier's. Therefore, the carrier incurred all of the risks associated with poor quality content. If an application was downloaded by thousands of users or more, and it crashed, the carrier could incur large costs as their support center had to deal with a multitude of upset customers demanding refunds for relatively low sums of money. Consequently, in order to protect themselves the carriers felt obliged to ensure that all content reached minimum quality standards, and they did so by conducting a round of acceptance testing. Over time, as the volumes increased beyond their internal testing capabilities, they created formal certification programs and outsourced the testing to third-party test companies to execute on their behalf.

### The Early Days

When first introduced, certification programs were viewed positively by developers—or at least by those that took quality assurance seriously. The benefit of being a developer with certified content was that you had access to millions of potential purchasers—which far outweighed the low cost associated with testing and certification.

However, as multiple manufacturers released a myriad of diverse devices, the complexity and cost associated with porting and certification across the entire testing matrix increased exponentially. A single round of certification for a large carrier could cost in excess of $10,000—with more costs incurred unless it passed the first time.

Some test companies, keen to increase their revenues, viewed certification programs as cash cows. They would apply the criteria stringently, knowing that if they could find a single failure, no matter how small, it would force another round of testing and result in increased revenues for the test company—regardless of whether it affected the overall user experience. Rather than stop the testing when a global issue was encountered and wait for the developer to create a fix and then resubmit, the test company then failed all of the builds, increasing the overall cost of certification. Some certification test companies even went so far as to fail all submitted builds if a documentation issue was encountered in the submission paperwork, whether or not that issue was related to the quality of the builds.

**The introduction of the iPhone and the Apps Store caused a fundamental shift in the need for certification. The strategy was to disassociate Apple and the wireless provider from the content.**

Developers started to view the testing programs as flawed and inconsistent. In an example case, a title with 40 builds was submitted for certification. The first 21 passed, but on the next one an obscure global bug—one that might occur once in 10 million plays—was discovered. Consequently, the test house failed all remaining builds. On questioning, they were unable to explain why the first builds all passed, even though they all contained the same issue. These kinds of actions led many of the certification programs to become discredited.

### A Market-driven Approach to Certification

The introduction of the iPhone and the App Store caused a fundamental shift in the need for certification. The strategy was to disassociate Apple and the wireless provider from the content. By providing a delivery platform that allowed anything (within broad limits) to be submitted, developers had to take responsibility for the quality of their own titles. Poor content would be quickly flagged through negative feedback from users. Allowing the marketplace (through user reviews and sales) to serve as the quality assurance mechanism, meant was no need for an official certification program.

As the Smartphone market has evolved, this successful content delivery model has been replicated by Google, Microsoft and others, resulting in the gradual demise of most of the legacy certification programs. The freedom to be able to deploy almost any content has been so successful that today there are close to a million applications available across all the Smartphone application stores.

### A Role for Certification Programs

So do certification programs play a role in the new mobile ecosystems? Increasingly, the answer to that question is "yes."

A number of factors are starting to come into play for developers. With so much content available, they are finding it harder to be discovered within the application stores, even if they have high quality content. Additionally, if they have a successful title, it is likely that within a few weeks of launching there will be a multitude of copycat titles available. (At the Mobile World Conference in Barcelona, one developer complained that, even though he was licensing IP from a major TV studio, already within the Apple Apps store there were more than 20 titles available illegally using the same IP.)

Developers are finding that they can mitigate the impact of knock-offs through certification. Certification programs allow them to legitimize their content and demonstrate that a third-party has audited it for quality. More importantly, the programs are starting to provide new delivery channels for certified content. Those developers who have titles included on these lists can see significant increases in the number of downloads as a consequence—especially for those who are not well known.

Device manufacturers, chipset providers and carriers are now looking at how to develop ecosystems based around their products. Interestingly, most are looking at providing very high quality optimized content, in the hope that they differentiate themselves from their competition. To ensure that the quality is built in, they are turning to new kinds of certification programs.

A good example is Sony Mobile, which has a testing program targeted around the Xperia PLAY device, the first PlayStation™ certified smartphone. This phone is different than most mobile devices in that it is directly targeted at handheld gamers who have an expectation of "console" quality levels built into their gaming experience. Since so many of the downloadable titles available from the Android Market (Google Play) fail to live up to that quality standard, Sony Mobile is working to identify quality content.

### Testing vs. Certification

The first thing to note is that the program is called a "Testing Program" rather than a "Certification Program." Although subtle, this difference demonstrates a fundamental change in philosophy from the old

# We Extend Your Reach

## One Partner
## Multiple Platforms

## Your Trusted Partner in Cross-Platform Game Design and Development

Robosoft®

iPhone | iPad | Android | Windows | Mac

robosoftin.com/games

**To help compensate developers for the cost associated with completing the testing program, Sony Mobile actively promotes titles that pass. The end result is that developers can identify their content as part of a smaller group of qualified, high-quality titles.**

certification programs. Sony Mobile's approach is to work with its developers to help provide quality content rather than penalize them for minor issues that the end user won't notice.

Sony Mobile provides game development recommendations and openly shares its test suite so that developers know in advance what is going to be tested. The goal is to help developers build quality into the development process rather than have to apply it retrospectively post-development.

The Sony Mobile program has resources set aside to help with the submission. If the wrong documentation is sent, normally a request will be sent to correct the issue. In some cases, test companies like VMC will fix issues on behalf of the client as a part of the testing program, without additional charges to the developer.

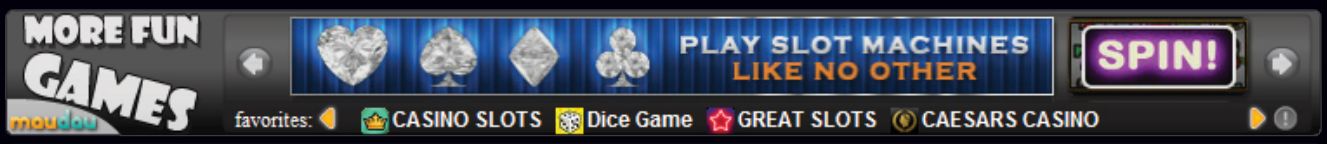
The program is unique in the mobile space. The severity of each issue is evaluated, and points are awarded for issues, based on the impact to the end user. Only when a threshold has been exceeded does the title fail. This is a distinct departure from many of the previous certification programs which implemented a one-strike-and-you're-out mentality.

To help compensate developers for the cost associated with completing the testing program and optimizing the title for the Xperia PLAY device, Sony Mobile actively promotes titles that pass. The end result is that developers can identify their content as part of a smaller group of qualified, high-quality titles and receive increased visibility to the end user as a consequence. Meanwhile, Sony Mobile enhances its ecosystem with high quality, optimized content. This encourages customers to stay with the platform while providing developers with increased visibility to attract more downloads.

Going forward, it is difficult to see a return to the legacy certification programs. However, it is reasonable and perhaps desirable to expect that more testing programs will be created to leverage different aspects of the Smartphone ecosphere. Developers, end users, device manufactures, wireless providers, and everyone in the mobile community can benefit from quality content. It's key to helping the industry thrive. Replacing certification with testing programs can provide an important function in pursuit of quality content. ❊

# maudau.com

*It's so easy to grow!*




Maudau provides click exchange tools for Social and Mobile applications. With more than 20 million users running through the system each day, maudau is the most attractive click exchange network available.

- Cross Platform Distribution
- Fully customizable bar including vertical and fluid options
- Traffic Injection
- 100% Transparent Reporting Features
- Geo and Genre Targeting

## Full Service Agency

Maudau replicates its success and provides all your marketing needs in one place:

- Customer acquisition
- Retention management
- Analytics
- Campaigns and budget management

partners@alawar.com
company.alawar.com

by Bill Kunkel, *Journalist, Writer, Game Designer;* and Annie van Bebber, *Founder & CEO, Fundraisers.com & Pokercares.com;* **Grants Pass, OR**

# We Have Seen the Future of Casual Gaming

## "Penny Slots" Become Serious Casino Business

### The Rise and Fall of Slots

During the evolution of Las Vegas as an American gambling mecca and Sunbelt tourist destination in the 1950s through the 1980s, slot machines were the meat and potatoes of the American gaming scene. Of course the table games—poker, blackjack, roulette, baccarat and company—looked more glamorous (one can hardly imagine James Bond jerking the lever on a slot machine). But the "pull" of the so-called one-armed bandits—with their accompanying sounds of spinning wheels and the periodic clatter of coin clusters cascading into metal trays—was the populist lifeblood of gambling houses large and small for decades.

But throughout the '80s and '90s, as Las Vegas became America's fastest-growing city, old casinos were regularly razed to make room for family-oriented fantasias that sold spectacle as well as slots. Meanwhile, a multitude of new casinos were being constructed off the Strip, designed less for the tourists and more for the locals and their new neighbors who were buying homes off the housing bubble as fast as the lenders would agree to finance them.

Tastes were changing and slots were seen more and more as representative of "old" Las Vegas, while video poker was the new 900 lb. gorilla in the gaming room. Poker, after all, offered gamblers several opportunities to experience the thrill of a win as opposed to the single pull of the slot machine lever. Following the original deal, video poker players could opt to exchange or retain the dealt cards, at which point the secondary rush kicked in. Soon, slots were replaced by video poker coin-ops. Worse still, the one-armed bandits that survived this gaming version of ethnic cleansing cost anywhere from 25 cents to $1 minimum per play. A few nickel slots remained, and even one or two of the old school penny slots could be found in some of the older Downtown joints, but they were more curiosities than serious moneymakers.

## A Changing Landscape

At that point, several events transpired which profoundly altered the gaming landscape. First, once Atlantic City voted to allow casino gambling in 1976, the genie was out of the bottle. Almost every financially-strapped city in America began pondering the success of the cities and states that were enjoying the gaming experiment and drooled over such idyllic scenarios as Nevada's lack of a state income tax.

Around the same time that Atlantic City was dreaming of re-inventing itself as the East Coast's Las Vegas, a Chippewa couple living in a mobile home located on Indian land in Minnesota challenged a tax bill they received from nearby Itasca County. With the help of Leech Lake Legal Services, they lost their case in state court, district court and Minnesota's Supreme Court. Unlikely as it seemed, however, the US Supreme Court agreed to review the case and in a unanimous and, at the time, shocking reversal of fortune, held that the states were not only unable to tax Native Americans living on reservations, they couldn't even regulate them. From that legal position, it was but a short walk to the behemoth that is now the Indian Casino business.

**One of the obvious facts that the gambling world's research demonstrated was that the younger players it wanted so badly were all video gamers—or, at the very least, had been at some point.**

Casinos, as a result, were no longer a novelty. The gilded gambling palaces in cities such as Vegas, which had long been thought "recession proof," suddenly found themselves competing for customers with scores of legal gambling halls everywhere from New York City to Mississippi riverboats.

Then the economy collapsed. As older customers died off and not enough players from younger demographic groups were taking their place, the casino business also collapsed. It soon became clear that the gambling world was going to have to try something new.

## Putting "Casual" into "Gaming"

It began with a look at who was and who wasn't visiting casinos, and it ended up with the gaming business looking to the video game industry for some answers. And behold, there were indeed answers. Demographic studies showed that the young, potential customers had all grown up exposed to the video game culture. They were familiar with its motifs and attracted to the format. The gaming industry had looked at the customers it wasn't attracting and found that a form of solution already existed. "Casual Gaming" may have become a tiresome buzzword to many members of the video game community by this point, but its success could hardly be debated. The concept had developed into a powerful force in recent years.

At the same time, video game development houses were cutting staff and even shuttering their doors as the downward spiral of the economy finally struck the video game business. Yet one of the obvious facts that the gambling world's research demonstrated was that the younger players it wanted so badly were all video gamers—or, at the very least, had been at some point. And video game development had come up with lots of design innovations that melded perfectly with the gaming coin-ops that filled every casino from Vegas to the Mohegan Sun. Consequently, the Penny Slots took on a new form of electronic gambling.

## The Rise of the Penny Slots

One of the great things about these gambling games is that some of them are server-based. Players accrue virtual rewards and status recognition points and store them to servers using passwords. This allows players to play *Star Trek* or *Lord of the Rings* in Las Vegas one week and, by entering their passwords, pick up the following week exactly where they left off—with all their gaming accomplishments displayed on-screen for anyone to admire—on another *Star Trek* coin-op in a casino in Upstate New York.

And while server-based technology bound thousands of individual gambling establishments into a one-world paradigm, young gamers also delighted in the discovery that the world of Penny Slots offered exactly the kind of entertainment they once enjoyed in video games—with the additional perk of a payout.

In fact, the gaming-happy Japanese seemed to get it. Williams, the old school coin-op game company, is known as WMS in gambling circles. And Konami recently made a deal with Sega to adopt several of the latter's video game classics into Penny Slots. ❊

*Bill Kunkel, also known as "the Game Doctor" and "the Grandfather of Videogame Journalism," was one of the kindest souls I ever had the pleasure to meet. I met Bill in the late '80s, and I took an instant liking to him. Bill and I had the chance to work together in the mid-'90s at happypuppy.com, and he truly was one of the most talented writers I ever had a chance to work with. He certainly had a way with words.*

*– AVB*

**As one of the most prolific and popular artists in the USA, we promise you have seen Michael's work.**

**ANNIE:** ***Can you give us a quick timeline of how you came to work on a slot machine? I know you said that originally you were just being hired to do the logo art, but your involvement seems to have grown exponentially.***
**MICHAEL:** I was approached by the game manufacturer Aristocrat who thought that my art would lend itself well to game themes. So after many successful focus tests we agreed to move forward.

**A:** ***When did the concept of amusing, anthropomorphic fruit and veggies first occur to you? What was your first work using them?***
**M:** About 10 years ago, I was doing a painting for a friend's birthday, and after finishing the painting I wanted to explore it further. It's been a great vehicle for storytelling about life around us, with the olives, strawberries and grapes as the primary characters.

**A:** ***I assume your slot from Aristocrat is still called Rockin' Olives? And from a slot machine POV, what are its most interesting features?***
**M:** We actually ended up using the title *Godard's Rockin Olives*, to capitalize on the Godard brand. As one who is fond of both gambling and humor, I think the most interesting feature is the player taking on the role of an animated olive and his humorous rock star antics.

**A:** ***You said something to the effect that each visual component of the slot's artwork was generated as a separate piece. Can you elaborate on that a bit?***
**M:** Originally my impression was that I would be providing designs in sketch form for all the elements of the game. What I actually ended up doing was hand-painting hundreds of these elements from the background to the symbols. The labor was intense, but it was a labor of love that ultimately gave the game a unique look.

**A:** ***How do you get that 3D effect in your work?***
**M:** One method I use in my paintings is a very strong light source. Additionally, I try to find that balance between photo-realism, the use of vibrant colors and shading to give it the 3D effect.

**A:** ***I remember that you're a video game fan—Xbox, if I have it right. How long have you been playing video games? What are your current favorites?***
**M:** Not to age myself, but I remember playing *Asteroids* in high school. My collection of video game hours exceeds my hours of sleep. I have always been competitive and fond of any challenge. Combine that with a little OCD and you got me pegged. On the Xbox, it's the *WSOP, Call of Duty* and *Lego Batman.*

**A:** ***Do you see a convergence between what are known as "casual" video games and penny slots? The use of virtual rewards, status rewards, etc. is old stuff in video games, but they're a whole new world in casinos.***
**M:** I would agree with that. I do believe that the gaming industry is slightly behind the tempo of video gaming. I would also venture to say that there are distinct differences between the two. The desired goals and the experiences are different. I think that one thing they do share in common is that the success of the game is due to people's personal connection with the attributes of the game. This was at the forefront of my mind during the entire creation process.

**A:** ***How does it feel to be the first artist personally credited with the creation of a slot?***
**M:** I haven't really thought about it in that way. I do believe with all my heart that it is the perfect marriage of all the things that I enjoy: gambling, art, and humor. Of all the projects I have ever had, this is by far the most rewarding.

**A:** ***How long have you been into slots?***
**M:** Growing up in and around Las Vegas, I have been around them my whole life. I do remember being fascinated by them before I was legal. And now slots fill up one of the rooms in my house.

**A:** ***Any future plans along these lines that you can discuss?***
**M:** I have enjoyed this project so much that I hope to continue creating games for the next 50 years. And since I am involved, I will warn you right now: Fasten your seatbelt, because you are in for the ride of your life.

INTENIUM

# We work closely with developers all over the world

## For a Billion Female Gamers

... and many more

We offer the best conditions for high quality localizations by native speakers

We bring your game directly to retail channels

You can join us too: **submission@intenium.de**

# Now We Are Talking

by Greg Kasavin, *Creative Director, Supergiant Games;* **San Francisco, CA**

# The Making of *Bastion*

***Bastion* started as a very simple idea: an action-RPG in which you build the world around you. We love the action-RPG genre but felt it was relatively under-explored. We wanted to find new ways to approach both the game-play and the narrative. That original idea inspired the themes and tone of the story along with the look-and-feel of the world and how it rises up around you as you move through it. Since we were a small team on the project, with just two people initially (we gradually grew to seven), we were able to make the game in a very iterative and collaborative way. There were no design documents or anything—just the ideas we were putting in the game, scribbled on white boards or on quick notes to each other.**

### Why did you choose to make an RPG?

For the most part, RPG was an intuitive choice. Supergiant cofounders Amir Rao and Gavin Simon were working with me at Electronic Arts for a number of years prior to this, making real-time strategy games in the *Command & Conquer* franchise. We were interested in a change of pace, and we wanted to try our hand at RPGs. We love RPGS, and besides, we just weren't seeing a lot of action-RPGs at the time—at least none in which narrative was a major part of the experience. We felt like we could contribute something positive there.

### What can you tell us about your target audience?

We initially released *Bastion* on Xbox LIVE Arcade, and our take on that audience was pretty straightforward: It's someone who's discerning about quality and open to new experiences. Games like *Braid, LIMBO, Castle Crashers,* and many others have succeeded on the service, not because they belong to a particular genre, but because they're interesting, well-crafted, imaginative games. Likewise, we didn't go about targeting a particular age group or type of player. Instead, we aimed to make our game highly approachable yet very specific. We knew we weren't making something for everyone, yet we wanted just about anyone to be able to pick it up and play it. We wanted the first-time experience to be immediately captivating in every way. The game ended up doing well on XBLA, and it also did very well on PC via the Steam service in particular. We felt like we were making a console-style game initially, so our success on PC was unexpected at first—though these days I think it's much more evident that many smaller titles can find big followings on Steam.

# The Making of *Bastion*

**What sorts of tools did you work with?**

*Bastion* is based on our own engine and proprietary tools. Gavin wrote the toolset so we could create and iterate on content for the game as quickly as possible. Since we're a small team, the efficiency of our tools is incredibly important, not just to our ability to make a game, but to our morale. Although we hand-craft all of our content (all of the thousands of little objects in every level are placed there by one of us), the tools make that process relatively simple. We also used a lot of free or off-the-shelf tools, everything from Photoshop (for 2D artwork) to Skype (for communication) to Subversion (for version-control). We also use Google Docs a lot for documentation and collaboration, and a great web-based tool called Basecamp for tracking project tasks. Game-making is very difficult, but in another sense it's never been easier thanks to the availability of these types of tools. Our team isn't all centrally-located—our audio director Darren Korb and voice actor Logan Cunningham are in New York while most of us are across the country in San Francisco. But thanks to these tools, we've been able to collaborate effectively anyway.

**Tell us a bit about your creative process.**

One of our mantras during the development of *Bastion* was that it should feel like a complete experience in every sense. There would be no vestigial or lackluster features. The story would end in a satisfying way, and everything about the game would feel like a meaningful part of the whole. I'm very happy with how we ended up delivering on this idea, so really there's no particular feature that I wish we could have included. However, we tried a ton of different things during development that we cut for various reasons. For example, we explored the possibility of having cooperative play in the game

but decided against it, as we felt it took away from the spirit of the story and distracted from our use of narration. We also had something like a gardening-and-planting system in the game, where the power of the *Bastion* location could be used to restore and improve a variety of different items. This evolved into other systems like the Shrine and the Lost-and-Found. Some of these ideas seemed really promising on their own merits, but they just didn't fit with the rest of the game. We also very nearly cut the New Game Plus mode because of how it expanded the scope of the game and our testing. I'm very glad we kept that in because of how it ties back to the narrative and gives invested players a chance to keep going and get even more lasting value out of the game.

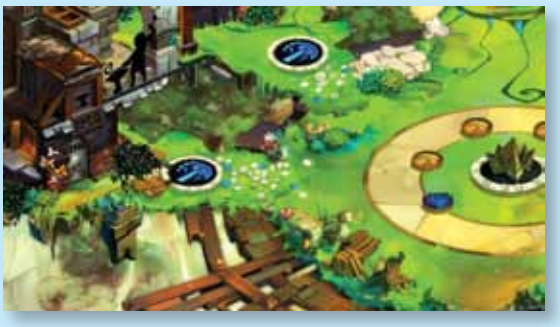
**Would you change anything about *Bastion* now that it's out?**

This may sound rather disingenuous or boastful, but really there's nothing I would change about it. I think I feel this way in part because of the themes of the story and how they reflect our development process—as well as my own personal long-standing goals of being able to work on something like this. I can say it's very much the game we wanted to make. If I had to name one thing I'd change, though, I suppose it would be a couple of the Proving Grounds (optional areas where you can test your skills with the different weapons). A couple of them ended up more challenging than we intended. It's possible to upgrade your weapons and come back to the Proving Grounds to make them much easier, but we heard from some players who bashed their heads against these levels for a long time without ever upgrading (players can be stubborn like that). *Bastion* isn't meant to be the sort of game where you can get stuck in any one place for very long—not even in an optional area like the Proving Grounds.

**Were you surprised by how the game was received?**

We were cautiously optimistic about how *Bastion* would be received, considering how much positive attention it was getting during development. However, we knew that the kind of press we were getting pre-release was based on only a small portion of the game, and we were anxious to see how the full experience would pan out for people. The response ended up being everything we could have hoped for. We couldn't have anticipated the degree to which the game would impact some of

its players, even though we did aim to make the sort of game that could leave a lasting positive impression. I should also give special mention to our musical score. We couldn't have expected just how much people were going to fall in love with the music Darren composed for *Bastion*. A lot of nice things have been said about many different aspects of the game, but the aspect praised most consistently has been the music. That surprised me, simply because music is such a subjective experience, and people's tastes naturally vary. But I guess *Bastion's* music hit people just the right way. It was essential to communicating the tone and creating the atmosphere we wanted to convey.



### What's next for Supergiant Games?

We've been keeping busy since the release of *Bastion,* supporting our game, releasing it on new platforms, exploring where we want to go from here. It's too early to say just yet what we're going to do next as a team, though we're definitely sticking together, and we're going to keep making games! The response to *Bastion* has been very encouraging and validating, and our experience working together on that project has inspired a lot of new ideas we want to pursue. We hope whatever we come up with next will have a similar impact as our first game, and whatever it will be, we will do our best to once again surprise players, draw them in, and give them a memorable experience in exchange for their valuable time.

**Greg Kasavin,**
*Creative Director*
Greg is creative director at Supergiant Games, the small studio behind *Bastion*. Previously, Kasavin worked in the gaming press for more than a decade—notably as editor-in-chief of GameSpot—until 2007, when he decided to pursue his childhood dream of making games.

AppFlood
By PapayaMobile
Are your Android user acquisition costs soaring?
AppFlood is a fresh new way to grow your Android users at no extra cost through the power of cross-promotion.
appflood.com

# The World's Largest Casual Games Publisher

## PC • Mobile • Cloud

Are you a game developer with a great game to share? Partner with Big Fish for world-class game distribution. Because we originated as a casual game developer, we truly understand the unique needs of our development partners. Helping developers succeed has earned us a reputation for being fair, supportive, and extremely responsive in the casual games community.

With a growing list of international sites and FREE localization services, Big Fish can help you take your game global.

## BigFishGames.com

To get in touch with our Developer Relations team, contact
GameSubmissions@BigFishGames.com

© 2012 Big Fish Games, Inc.

# GAME:DUELL

Bring people together to have a good time with games

Available on the App Store

facebook

www.gameduell.com/jobs